

<110> Cheikh, Nordine  
 Liu, Jingdong

<120> Nucleic Acid Molecules and Other Molecules Associated with the  
 Cytokinin Pathway

<130> 16517.256/38-21(15094)C

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 gccgaagaag ttgccaggcg aggtgatctc cgaagaatat tctctggaat acggaactga 240  
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 <222> (1)...(440)  
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 cgcttgggcg ngatcgnctc ctncatccng gtnatncccg acttnccaaa gccagggatn 180  
 atgtttcagg acatcangan gntgntgttc gatcccaagg cgntccgtga caacatatac 240  
 cattttgtca agcggtagaa ggaccaagg atcacnttg aaantaggag ttaaagctag 300  
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aggcgagggtg atctccnaan agtatntttt ggaatatgga actgacaana atagaaatgc 180  
atgtcggant tttacaaggc caacaaccgg cctttttgta ntncaatnat cttnttgnta 240  
ccggtggaac attttttcaa nttnnaaaaa ttttttaaac tttttgaacc aaaagntttt 300  
gaaagttcct ttgttanttn naattnncca aaaantnaan gggccaaana aactttgnga 360  
cacgggcan atttttttcn tttgggaaaa aaaacacctt aaacngnaan ttttngacnt 420  
tttaaaaaan attttngccc ccccaatnct naaaattttt catttttncca 470

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<400> 7

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naaaggntgt tgagtgtgct tgcntnattg aattggcaga actgaagggc cgagacaaac 120  
ttggggacag ggcagttntt gttcttgngg aagcagatgc ttgancggaa cttgggactt 180  
ctcttctcag agagttagag ttagcgctgt tgatgctacc tntctggaaa acaacaaagt 240  
tncccatggt ggntanagtn nggctgacac gtaataaaan tttcatncca aattgtgatc 300  
ccctgaatga natgacaatg tagacatgat tgctggctcct tgnatactgt gggnttatta 360  
ttcacatcaa antaaangga taatcccnga atgggagctn aaaaaaangg ac 412

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 acataangac antgatgctc gaccnnaaag cgttccgtga caccatcgac gtcttcnttg 180  
 agcggtagaa ggaccaaagg gatcaccgta attgctgggt tggaagctag agggttcatt 240  
 tttggncttc tatcgctcta ccatnaatgc gaaatttgta ccttttagga agcctaaaaa 300  
 atttccaagc caggttaatc tncgaaagaa tattctcttg aatnccnaaa ctnanaaana 360  
 taaatatnca ttttgganct ttacaancca aacnaattgg gcttttngta tttcnatnat 420  
 nttattntca cnagtnnaac aatttttt 448

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 <222> (1)...(437)  
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 ggcccaggag gcggccactg acccccggct gcagggcatc tccgacgcca tccgcgtcgt 240  
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 cgccgtcgcc gggatcgagg ccaggggctt catatttggt ccggcagtc attggctatt 420  
 gggcgccnaa ttcaaaa 437

<210> 10  
 <211> 461  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(461)  
 <223> unsure at all n locations

<400> 10

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 catcgacgac ctgggttcga ccggagggac actctgtgct gcgatcaggc ttctagaacg 120  
 tgctggagcc gatgtggtcg agtgcgcgtg tgtcatcggg ctcccgaat tcaaggattt 180  
 gtacaagttg aatggaaaac ctgtatacgt gctgggttgag tctcgtgaat aatcggagaa 240  
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 aatcttggtg aggggagaga ttgtagtgg ttaagctgag tanttgaana acctgtaatt 420  
 tctgcacnga acatgatngn tattagttnn attccaccac t 461

<210> 11  
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<400> 11

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 gcgtgtcggg gccatcgagc gatccggcga gcgggtgctg gtcacgacg acctggttgc 120  
 gaccggagga cactctgtgc tgcgatcagg cttctagaac gtgctggagc cgatgtggtc 180  
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 cctgtatacg tgctggttga gt 262

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 <212> DNA  
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<400> 12

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gcgaccggag ggacactact gtgctgcgat caggcttcta gaacgtgctg gagccgatgt 180  
 ggtcgagtgc gctgtgtcat tgggctcccg aaattcaagg attgtacaat tgatggaaaa 240  
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<220>  
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<400> 13

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 aactgacaag atagaaatgc atgttgagc tgtacaggcc aacgaccggg ctcttgtagt 180  
 cgatgatctt attgctaccg gtggaacact ctgtgcagct gtcaaactta ttgaacgtgt 240  
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 gaattctcag agagtttggg gcccgtcgat gcttcctctn tggagacaac acaagtttnc 420  
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<210> 14  
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<400> 14

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 agttgccagg cgagggtgat tccgaagagt attctttgga atatggaact gacaagatag 180  
 aaatgcatgt tggagctgta caggccaacg accgggctct tgtagtcgat gatcttattg 240  
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 <211> 288

<212> DNA  
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<400> 15

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atgatcttat tgctaccggg ggaacactat gtgcagctgt caaacttatt gaacgtgttg 240  
gagcaaaggt tggtgagtgt gcttgtgtca ttgaattgcc agaactga 288

<210> 16  
<211> 297  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(297)  
<223> unsure at all n locations

<400> 16

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gctgtacagg ccaacgaccg ggctctttgta gtcgatgac ttattgctac cgggtggaaca 180  
ctatgtgcag ctgtcncact tattgaacgt gttggagcaa aggttggttg gtgtgcttgt 240  
gtcattgaat gccagaactg aagggccgag acaagcttgg ggacaggcca gtttttg 297

<210> 17  
<211> 289  
<212> DNA  
<213> Zea mays

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<222> (1)...(289)  
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tattcttttg aatatggaac tgacaagata gaaatgcatg tcggagctgt acaggccaac 120  
gaccgggctc ttgtagtcga tgatcttatt gctaccgggtg gaacactatg tgcagctgtc 180

aaacttattg aacgtgttgg agcaaagggt gttgagtgtg cttgtgtcat tgaattgccca 240  
gaactgaagg gccgagacaa cttggggana ggccattttg gcctggngg 289

<210> 18  
<211> 276  
<212> DNA  
<213> Zea mays

<400> 18

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agaaatgcat gtcggagctg tacaggccaa cgaccgggct cttgtagtcg atgatcttat 180  
tgctaccggt ggaacactat gtgcagctgt caaacttatt gaacgtgttg gagcaaagggt 240  
tgttgagtgt gcttgtgtca tgaattgccca gaactg 276

<210> 19  
<211> 267  
<212> DNA  
<213> Zea mays

<400> 19

accaagggat caccgtggtt gctggtgttg aagctagagg gttcattttt ggtcctccta 60  
tcgcttttagc cattggcgca aaatttgtgc ctttgaggaa gccgaagaag ttgccaggcg 120  
aggtgatctc cgaagagtat tctttggaat atggaactga caagatagaa atgcatgtcg 180  
gagctgtaca ggccaacgac cgggctcttg tagtcgatga tcttattgct accggtggaa 240  
cactatgtgc agctgtcaaa cttattg 267

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<211> 244  
<212> DNA  
<213> Zea mays

<400> 20

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tcttattgcc accggtggaa cactctgtgc agctgtcaaa cttattgaac gtgttgagc 120  
aaaggttgtt gagtgtgctt gcgtcattga attggcagaa ctgaagggcc gagacaaact 180  
tggggacagg ccagtttttg ttcttgtcga agcagatgct tgagcggaac ttgggacttc 240  
tctt 244

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 <212> DNA  
 <213> Zea mays

<400> 21

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 actgaagggc cgagacaagc ttggggacag gccagttttt gtccttgtgg aagcagacgc 180  
 ctgagcggaa cttgggactt ctgagagagt ttggcgccgt cgatgctccc tctctggaga 240  
 caacacagtt tcccatgtta ccatgt 266

<210> 22  
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 <212> DNA  
 <213> Zea mays

<400> 22

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 gcaaagggtt ttgagtgtgc ttgtgtcatt gaattgccag aactgaaggg ccgagacaag 120  
 cttggggaca ggccagtttt tgtccttgtg gaagcagacg cctgagcggga acttgggact 180  
 tctcagagag tttggcgccg tcgatgtcc ctctctggag acaacacagt t 231

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 <211> 174  
 <212> DNA  
 <213> Zea mays

<400> 23

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 gggctcttgt agtcgatgat cttattgcta ccgggtggaac actctgtgca gctgtcaaac 120  
 ttattgaacg tgttggagca aagggtgttg agtgtgcttg tgtcattgaa ttgc 174

<210> 24  
 <211> 275  
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 <213> Zea mays

<220>  
 <221> unsure

<222> (1)...(275)  
<223> unsure at all n locations

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tcttgtagtc gatgatctat tgccaccggt ncaacactct gtgcagctgt caaactattg 180  
aacgtgttgg agcaaagggt gttgagtgtg ctgcgtcatg aatggcagaa ctgaagggcc 240  
gagacaaact tggggacagg ccattttgtg cttga 275

<210> 25  
<211> 229  
<212> DNA  
<213> Zea mays

<400> 25

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aggccagttt ttgtccttgt ggaagcagac gcctgagcgg aacttgggac ttctcagaga 120  
gtttggcgcc gtcgatgctc cctctctgga gacaacacag tttcccatgt taccatgttg 180  
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<210> 26  
<211> 119  
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<213> Zea mays

<220>  
<221> unsure  
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<223> unsure at all n locations

<400> 26

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<210> 27  
<211> 431  
<212> DNA  
<213> Zea mays

<220>  
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<223> unsure at all n locations

<400> 27

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gcgtccgctg acgcgcgctt ggccggggatc gcctcctcca tccgcgtcat ccccgacttc 180
cccaagccag ggatcatggt ccaggacatc acgacgttgc tgctcgatcc caaggcggtc 240
cgtgacacca tcgacctctt tgtcgagcgg tacaaggacc aagggatcac cgtggttgct 300
ggtggtgaag ctagagggtt catttttggg cctcctatcg ctttagccat tggcgcaaaa 360
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ccttttgaaa a 431
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<210> 28

<211> 460

<212> DNA

<213> Zea mays

<220>

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<222> (1)...(460)

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<400> 28

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cctcctccat ccgcgtcatc tccgacttcc ccaagccagg gatcatgttc caggacatca 240
cgacgttgct gtcgatccc aaggcggtcc gtgacaccat cgacctcttt gtcgagcggg 300
acaaggacca agggatcacc gtggttgctg gtggtgaagc tagagggttc atttttgggtc 360
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<211> 431

<212> DNA

<213> Zea mays

<220>

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<222> (1)...(431)  
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 gcgtccgccg acgcgcgctt ggcggggatt gcctcctcca tccgcgtcat ccccgacttc 180  
 cccaagccag ggatcatgtt ccaggacatc acgacactgc tgctcgaccc caaggcgttc 240  
 cgtgacacca tcgacgtctt cgttgagcgg tacaaggacc aagggatcac cgtagtgtgct 300  
 ggtgtggaag ctanaggggt catttttgggt cctcctatcg ctctaaccat cantgcgaaa 360  
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 gcgatggcgt ncgctgacgc gcgcttgggc gggatgcct cctccatccg cgtcatcccc 180  
 gactttccca agccagggat catgttccag gacatcacga cgtttgctnc tnnatnccaa 240  
 ggcgttccgt gacaccatcg acctcnttgt cgagcggtac aaggaccaag ggatcacctg 300  
 ggttgctggt gttgaancta gaggggttcat ttttggtcct tctatngctt tagccattgg 360  
 cgcaaaaatt gngcccttta agaaanccga ataaatntca ncnaggngat ttngaagaa 420  
 ntttttttga aanttggaact tttccanant naantgggtt tnnngngttt nc 472

<210> 31  
 <211> 271  
 <212> DNA  
 <213> Zea mays  
 <220>

<221> unsure  
<222> (1)...(271)  
<223> unsure at all n locations

<400> 31

gcgagggcag gcggtggctc cgatggcgtc cgccgacgcg cgcttggnng ggattgcctc 60  
ctccatccgc gtcacccccg acttccccaa gccagggatc atgttccagg acancacgac 120  
actgctgctc gacccaagg cgttccgtga caccatcgan ctcttcgttg agcngtacia 180  
ggaccaaggg atcacgtag ttgctgggtg ggaagctaga gggttcattt ttggccctc 240  
ctatcgctct agccatcggt gctaaatttg t 271

<210> 32  
<211> 294  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(294)  
<223> unsure at all n locations

<400> 32

gtctcgcatc ccgtccccgt ccgcncgggc cgacgcgcgc ttttcgtccc cgcgtcaggt 60  
ncgcggggctc cactgagcgt gcgcgtcacc ggcggcaggc gagggcaggc ggtggtggcg 120  
atggcgctccg ctgatgcgcg cttggcgggg atcgctcctt ccatccgcgt catccccgac 180  
ttccccaagc cagggatcat gtttcaggac atcacgacgt tgctgctcga tcccaaggcg 240  
ttccgtgaca ccatcgacct ctttgtcgag cgggtacaagg aacaagggat cacg 294

<210> 33  
<211> 285  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(285)  
<223> unsure at all n locations

<400> 33

gtccccgtcc gcgccggccg acgcgcctt ttctccccg cgtcagggtc gcgggctcca 60  
ctgagcgtgc gtgtcaccng ngggaggcaa ggcaggcggt tgggtggcgat ggcgtccgct 120  
gacgcgcgct tggcggggat cgcctcctcc atccgcgtca tccccgactt cccaagcca 180



gggatcatgt tccaggacat cacgacgttg ctgctcgatc ccaaggcggt ccgtgacacc 240  
atcgacctct ttgtcgagcg gtacaaggac caaggatcac cgtgg 285

<210> 34  
<211> 269  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(269)  
<223> unsure at all n locations

<400> 34

cngacgctgg ggcgcggccg acgcgcctt ttggtccccg cgtcagggtcc gcgggctcca 60  
ctgagcgtac gtgtcaccgg cgggaggcaa gggcaggcggtg tgggtggcgat ggcgtccgct 120  
gacgcgcgct tggcggggat cgcctcctcc atccgcgtca tccccgactt cccaagcca 180  
gggatcatgt tccaggacat cacgacgttg ctgctcgatc ccaaggcggt ccgtgacacc 240  
atcgacctct ttgtcgagcg gtacaagga 269

<210> 35  
<211> 285  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(285)  
<223> unsure at all n locations

<400> 35

cgcaccccg ccccgccgc nccggcngac gccgcctttt cgtccccgcn tcagggtccgc 60  
ggctccactg agcgtgcgcg tcaccggcgg caggcgaggn caggcggtgg tggcgatggc 120  
gtccgctgat gcgcgcttgg cggggatcgc ctctccatc cgcgtcatcc ccgacttccc 180  
caagccaggg atnatgtttc aggacatcac gacgttgctg ctcgatccca agggcggtcc 240  
gtgacaccat cgacctcttt gtcgagcggt acaaggacca agggg 285

<210> 36  
<211> 287  
<212> DNA  
<213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(287)  
 <223> unsure at all n locations

<400> 36

cnagtntcgc atccccgtccc cgtccgcacn ggengangcc gcctttncgt ccccgcgta 60  
 ntncgaggac tccactganc gtgcgcgtna ccggcggcag gcgaggncag gcggtggtgg 120  
 cgatggcgtc cgcngatgcy cgcttgccgg ggatngcctc ctccatccnc gtcacccccg 180  
 acttccccaa nccagggatc atgtttcagg acatcacgac gttgctgctc gatcncaagg 240  
 cgttccgtga caccatcgac ntctttgtcg ancngtaciaa ggaccaa 287

<210> 37  
 <211> 458  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(458)  
 <223> unsure at all n locations

<400> 37

ttcacncgtn cggtttncgc ttttcggcat nccgtccccg tccgcgcggg gncgattncg 60  
 ncttttcgtn ngcgcgtcag ngtcgcggct ccaactgagcg tgcgtgtcac cggcgggagg 120  
 caagggcagg cgggtggtggc natggcgctc gctgacgcgc ncttggcggg gatcgctnc 180  
 tncatncgn tcatccccga cttccccaaag ccagggatca tgttccagga catcacgacg 240  
 ttgctgctcg atcccaaggc gttncggtga caccatcgac ctnttttgtc gaancggtac 300  
 aaggaccaan ggatcaccgt ggnttgctgg tgttgaagct agagggttna ttttttggtc 360  
 cttctatcgc tttanccatt ggcgcaaaat ttgtgccttt gaagaanccc aaaaaagttg 420  
 ccacgcnaa gtgaacttcc gaaaaagggt cttttgga 458

<210> 38  
 <211> 272  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(272)  
 <223> unsure at all n locations

<400> 38  
 cngacgctgg ggcgccgtcc ccgtccgcgc cggccgncgc cgccttttcg tnccegcgtc 60  
 agntgcgcgg ctacactgag cgtgcgtgtc accggcgana ggcaagggca ggcggtggtg 120  
 gcgntggcgt ccgntgncgc gcgcttggcg gggntcgct cctccatccg cgtcatcccc 180  
 gncttcccca agccagggnt cntgttccag gacntcacgn cgttgctgct ngntnccaag 240  
 gcgttncgng ncacntnngn cntctttgtc ga 272

<210> 39  
 <211> 216  
 <212> DNA  
 <213> Zea mays

<400> 39  
 caagggcagg cgggtggtggc gatggcgctcc gctgacgcgc gcttggcggg gatcgctcc 60  
 tccatccgcg tcatccccga ctcccccaag ccagggatca tgttccagga catcacgacg 120  
 ttgtgctcga tccaaggcg ttccgtgaca ccatgacttt tgtcgacggt acaggacaag 180  
 gatcacgtgg ttctgtgttg agctagaggt catttt 216

<210> 40  
 <211> 312  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(312)  
 <223> unsure at all n locations

<400> 40  
 ancctcgct cccgtccgcn tccgcgcgc ctttttcgtc cccgcgtccg cgtcgcggtc 60  
 tccactgggc gtgcgcgtca ccggcgggag gcgagggcag gcggtggtcg cgatggcgtc 120  
 cgccgacgcg cgcttggcgg ggattgcctc ntccatccgc gtcaatcccc gacttcccca 180  
 agccaaggat catgttccag gacatcaacg acaatgctgc tcgaccccaa agcgttccgt 240  
 gacaccatcg aactcttcgt tgancggtaa naagaacaan ggattaaccg taantgctgg 300  
 tgtngaaact aa 312

<210> 41  
 <211> 237  
 <212> DNA

<213> Zea mays  
 <400> 41  
 tgtgcggggc tacttcgctt ggtctctggt ggacaacttt gaatggaccg cgggctacac 60  
 cgaacgttac ggcatagtct acgttgaccg taatgacggc tacaaacgct acatgaagaa 120  
 gtcagccaag tggttgaaag agttcaacac tgagaaggct ggcagcgcct aatgatgtgc 180  
 catgcataaa agaccgggtc tgtgtgattt gaattctata tttttatttg cacctcc 237

<210> 42  
 <211> 280  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(280)  
 <223> unsure at all n locations

<400> 42  
 gncgggcatc ccantggtcc ttggatgggg anttcgtgga tctacntann tcctgaaggc 60  
 tannggatnt agcttatnat cangaagaac aaatacggaa anccacccat ctacatcact 120  
 gagaacggga tngtgacgt tgancatggc gatctacca tggaagttgc cttggatgac 180  
 cacannagng tanattanct ncagcgcgac atoganantc ttanggcgctc aaganacttg 240  
 ggagcnaatg tgcagggcta cttcgcntgg nctctattgg 280

<210> 43  
 <211> 282  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(282)  
 <223> unsure at all n locations

<400> 43  
 cggnacntgg tatgcttctg tgactatgga attttgtaaa cagcttttaa tgcattgttg 60  
 agtattttatt aattttgtat acttctttga aaatgagctt ggtgttgtat ttgcaaatca 120  
 tcagatgggtg actatatggg aatgtatttg gttacccaat gtggaatggg ttattttcat 180  
 gatatttgtg taacagaagt tttaaccttt aagggctctg ttggttgggc tgtggctgtg 240  
 aaaaaagttg ctgtgggctg tgagctgtga aaaaagctgc tg 282

<210> 44  
 <211> 294  
 <212> DNA  
 <213> Zea mays

<400> 44

accatcgcta cgtgggagat ctggagatcc tgcagtcgct gggagtcaac gcctacagat 60  
 tctccatctc atgggcgagg gttctaccaa gaggccgggt tggtagcgct aatgcaggcg 120  
 gggtagcttt ctacaaccgc ctgatcgatg cgctcctgca gaaaggaata cagccattcg 180  
 tcaactctgaa ccatttcgac atgccgcgcg agctggagggt ccggtacgtg gctggctgga 240  
 cgctgggatc cgggaggagt acgagcacta cgcggaacgtc tgcttcgggg cgtt 294

<210> 45  
 <211> 279  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(279)  
 <223> unsure at all n locations

<400> 45

gaaaaagctt cttcctggat ccagccattht ggtaggtttt tggcttttag gggggcaaaa 60  
 gccaaagcca aaattcaaac caaacacacc cagtcatttt ggcttttcta tatacaatgc 120  
 tttaactatg tatttagata tagtgtatat ttaagtgcac tataaaagat gccccctcca 180  
 tcccnnaata aaatgtgttt taccttttta gttgatacat gcaataatga atatatttgt 240  
 cttacatatg tgtctagatt catcatcatc catttgaac 279

<210> 46  
 <211> 140  
 <212> DNA  
 <213> Zea mays

<400> 46

gtcatattct ccagcaccgt ggctaataat gtattgttgc agtacaaaaa aaaaaatata 60  
 atccacaagg taaattttctt aatctataac cactatttga aattggtagt ctacaatcta 120  
 tttgatgctt taagtgaact 140

<210> 47  
 <211> 291  
 <212> DNA  
 <213> Zea mays

<400> 47

aggaaaacaa attatacaac tttcatgagt atttaagagc aagcacacgg gctcagttga 60  
 tgaattccct gaatcacatt tcccatatgg ctcggaacaa cgggtgggtg gaaatgcccc 120  
 aatggagtat gcaagcttta caataagatt tggctcattg aatgtgaccc agtgctttac 180  
 tcggtcacca aacatcttga agcaaagctc aacgaagtag gtgaagtcct ccctgaatag 240  
 aaataaagaa acaaccacat atgaacttac ggcaccttcg tagataaagc t 291

<210> 48  
 <211> 315  
 <212> DNA  
 <213> Zea mays

<400> 48

cccaggacaa aaatgcgcta acccaaccgg gaactcgctc accgagccat acattgttgc 60  
 ccacaacctc ctccgagctc acgctgagac tgtccatgag tacaacaagc attacagagg 120  
 taacaaggac gcacagatag ggattgcatt cgacgtgatg ggccgtgtgc catatgacaa 180  
 tatgtttctc gacggccagg cccaagaaag gtccattgat tataacctag gatggttcat 240  
 ggagccggta gttcgcggcg actacccttt ctccatgaga tcattgatca aggatcggct 300  
 accctacttc accga 315

<210> 49  
 <211> 290  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(290)  
 <223> unsure at all n locations

<400> 49

ctgccagcgt atgggcctga cgggaaaccc attggctctc ctgtacgtat atctttccaa 60  
 cactatatga atttgttcac attattctan atttatgttt aaagtgattg gtgtaaaaaa 120  
 ttcacccaaa aatataagca cagaagaatg tttgctcatg gatgaaatta tacgtgttga 180  
 gtagcaaatg ttttgtgttg gcagtaaagc agaacaaatc tttacttttt tgtggaaata 240

tgcatgttgt taactagtga ataatatctg ctacaatttg cagatgggaa 290

<210> 50  
 <211> 299  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(299)  
 <223> unsure at all n locations

<400> 50

ctaatatgga cggaaaaaaaa atgccacaaa caactatatt ttagcggaat gattaataat 60  
 ctaatggtat acatgacgta tgggcttcta agcaagccat gtgcagaaat gcagaatcng 120  
 cccatagccg gcatcgacgg acctgggcat gttgggctgg agtcctaaga tgaccttttt 180  
 gcgagatatt tgactcaaac aatctaacca actcaactaa actagataact tttggctctt 240  
 ttattttctt tcacgaaact ttttgtcaac gtaggttttt agtttggtat acttattaa 299

<210> 51  
 <211> 250  
 <212> DNA  
 <213> Zea mays

<400> 51

ggccggtcta gtccgaggct ccatcgacta cgtcggagtc aaccagtaca ctgcctacta 60  
 cgtgctgat cgacggccaa acgctacggc ggcgccgccc agctactcgt ccgactggca 120  
 cgctgagttc gtctatgaac gcgacggtgt gccgattgga ccaagggcga actcagactg 180  
 gctctacatc gtgccttggg gactgtacaa agccgtcacc tacgtcaagg agaagtacgg 240  
 caaccccacg 250

<210> 52  
 <211> 237  
 <212> DNA  
 <213> Zea mays

<400> 52

gggaccgact acccttcttc actgacgagg agcgagagaa gctagtgggc tcatatgaca 60  
 tgctgggggt aaactactac acctcaaggt tctccaaaca catcgatatc acgcaacaca 120  
 acacactaag gctcaacact gacgatgcat atgccagtca ggaaacgaaa gggcctgacg 180

gcgagcccat tggctctccg atggggaatt ggatctacct gtatctctcaa ggcctaa 237

<210> 53  
<211> 315  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(315)  
<223> unsure at all n locations

<400> 53

anacaatctt cagaatactc tggggggctg gattttctgac aagattgtgg agtactttgc 60  
attgtatgca gaagcttgct ttgcaaattt tggagacagg gtaaagcatt ggataacaat 120  
caatgaacct ctccaaactg caatcaatgg ttatgggatt ggaatttttg cacctggagg 180  
atgccaaagg gaaactgcta gatgttactt ggctgcccac caccaaatct tggctcatgc 240  
tgctgctggt gatgttatag aagaaaatcg aggctgcaca agtgtgaagt aggggtgggtg 300  
tgattgtgaa tgggc 315

<210> 54  
<211> 339  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(339)  
<223> unsure at all n locations

<400> 54

gggcgctgga tccgcgggcg gcggtgaatc gcgtgcgggc tgacgtgagc gctgagcggg 60  
attcgcggcg ggggcagtct acgctccact cttaatatgtt gtagagatac tttataaaaa 120  
gtacttttta tgacaaattg acgcatataa atatcagggt ccaaaaacta aataacaaaa 180  
tagttatttg tagtcaaaat tttataagtt tgactcgaac cttatccaaa acgacaacta 240  
ataggaaacc ggaggggagta cgtgacccaa caccaccatt taagaccgac ggagaaccac 300  
atggacatgg ggcgtgnttg ggaagggtgcc cagtanccc 339

<210> 55  
<211> 187  
<212> DNA



<213> Zea mays  
 <400> 55  
 gatttataac ctaggatggt tcatggagcc ggctggtcgc ggcgactacc ctttctccat 60  
 gagatcattg atcaaggatc ggctacccta ctttaccgac gacgagaaag agaagctagt 120  
 gggttcgtat gacataatgg ggataaacta ctacacctcg aggtttttcca agcacatcga 180  
 catctcg 187

<210> 56  
 <211> 271  
 <212> DNA  
 <213> Zea mays  
 <400> 56  
 ccttttataa actcaactga agatcaaaaa gcagcgcaaa gggccaggga cttccatatt 60  
 ggttggtttc ttgatccatt aataaatggg caatatccaa cgataatgca agacattgtg 120  
 aaagaccggc taccaagttt cacacctgaa caggccaagc tagtcaaggg ctcatcagat 180  
 tatttcggga tcaatcaata tactacatac tacattgcag atcaacaaac tcctccgcag 240  
 gaccaccgag ctactcgtcc gactggggcg t 271

<210> 57  
 <211> 275  
 <212> DNA  
 <213> Zea mays  
 <400> 57  
 cgaaagaaca cctctgtttt ctctgtttga aagatgagct taatcctata aacgcacaca 60  
 agaagctaac ttaagaagcg ttcccatgca tacgcattag cttggctaga tgagtcacta 120  
 tgacaatgac cgggtccagt gatgtgtctg gtctaatacg gatcgtccgg caagaaaaga 180  
 aatgaaatca ggtgcattga acctgagctt gtcataatacc caccacatct caaaatataa 240  
 acatatattc atcaatcatc tacgaatgca atttg 275

<210> 58  
 <211> 315  
 <212> DNA  
 <213> Zea mays  
 <400> 58  
 cgcagagggg cagggtcggg atcctgctgg atttcgtgtg gtacgagccc ctcacgggcg 60



<220>  
 <221> unsure  
 <222> (1)...(284)  
 <223> unsure at all n locations

<400> 61

acggaacctt atatcgttgc tcataatttt ctcttgtcac atgctgctgc tgtgtcaaga 60  
 taccgtaaca agtatcaggc tgctcagaaa ggaaagggtg gaatagttct ggacttcaat 120  
 tgggatgaag ctctcacaaa ctcaaccgaa gaccaagcag cggctcaaag agcaagggtt 180  
 tccangttgg ttggtttgct gatcccatta taaatggmnt tatccccagn tatgccagnt 240  
 ntngnaaaag agnggctgcc cattttactc nggagnaagc taat 284

<210> 62  
 <211> 278  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(278)  
 <223> unsure at all n locations

<400> 62

ggccaaccaa agggctggat ctaggaagca gctttttcta aaagctgact ttctcacagt 60  
 gcaaattctga aagcaccctt aaacctgctt ttagtgactt ttcggatgga actgtgaaaa 120  
 catatatcga ngaactttta acgactttta gtgatttcca ccaaacgggtt tttagctttt 180  
 taacgactca cagctacagc agctttttcc acagctcaca gccacagca attttttcac 240  
 agcccacagt tcaaccaaac agacctatat anccatgg 278

<210> 63  
 <211> 269  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(269)  
 <223> unsure at all n locations

<400> 63

gtgtggtacg agccgctgac caagtccgtg gaggacgagt acgcggcgca ccgggctcgg 60  
 atgttcaccc ttggctgggt cctgcacccc atcacctacg gccactaccc ggagacgatg 120

```
cagaagatcg tcatggggag gctgccaac ttcaccttcg agcagtctgc catggtcaaa 180
ggctcagcgg actacgtcgc catcaaccac tacaccacgt actacgccag caacttcgtc 240
aacgccacag agaccactta ccgcaangt 269
```

```
<210>      64
<211>      207
<212>      DNA
<213>      Zea mays
```

```
<400>      64
gccccaggat cctgggtgat ttcacagctt tcgccgactt ctgcttcaag acgtacggcg 60
accgggtgaa gaactggttc accatcaacg agccgaggat gatggcccag catgggtacg 120
gcgacggctt cttccccccc gccagatgca ccggctgcca gttcggcggc aactccgcca 180
ccgagccgta catcgccggc caccacc 207
```

```
<210>      65
<211>      290
<212>      DNA
<213>      Zea mays
```

```
<220>
<221>      unsure
<222>      (1)...(290)
<223>      unsure at all n locations
```

```
<400>      65
ccaacttcac cttcgagcag tctgccatgg tcaaaggctc agcggactac gtcnccata 60
caaccactac accacgtact acgccagcaa cttcgtcaac gccacagaga ccaactaccg 120
caacgattgg aatgcaaaga tttcgtatga gcgagatgng tgtgcccatt ggcaaaaggg 180
cgtactcgga ctggctttac gtcgntccat gggggctcta caaggctctg atttggacca 240
aggngaattc aacagccctg tgatgctcat cggagagaac ggattgacct 290
```

```
<210>      66
<211>      288
<212>      DNA
<213>      Zea mays
```

```
<220>
<221>      unsure
<222>      (1)...(288)
<223>      unsure at all n locations
```

<400> 66  
acagcttctc ttttcattct acacaattta tttatnnga tactccctcc gtctcaaaat 60  
ataattcatt ttagactaaa catatatcca ttagttaacc tatgaatata gtttgtatgt 120  
atatctacat tcattatcaa ttattcgaat gtggacggag aactatattt tgggacggag 180  
ggagtactac ttggctttat ctgataccat tntttatttt gctttctaca caatttacgn 240  
cagggcanct catacaatta ttcagatntt naactggagt tcagtcat 288

<210> 67  
<211> 294  
<212> DNA  
<213> Zea mays  
<220>  
<221> unsure  
<222> (1)...(294)  
<223> unsure at all n locations

<400> 67  
cgccgagcng cacactccag cgtcgagcnc tacgtcgtca cccacaactg catcctggcg 60  
cacgctgccg tncgccgncn tctacancng cagctaancg tgccgaacag cagggcgtng 120  
tcggnatcaa natctacacc ttctggaact accccttctc cntgcgtncg gcngaagtcc 180  
aggccacgca gngttcgntn nattcatgat cggntggatg gtnaaccggt tngngnangg 240  
tgatancctc aagtgatgaa gagganagtc gggtcngttt cccaggttna ctaa 294

<210> 68  
<211> 289  
<212> DNA  
<213> Zea mays  
<220>  
<221> unsure  
<222> (1)...(289)  
<223> unsure at all n locations

<400> 68  
gatggccaag cacggcgggc ggggccccag catctgggac gccttcatag aggttcccgg 60  
gaccatccct aacaatgcca ccgtgacgt gacggtcgac gagtatcatc ggtacaagga 120  
agatgtgaac ataatgaaga acatgggctt tgtgcgtacc gattttcgat ctcttggtcg 180  
aggattttcc nagatgganc tggcaaggta aaccagnang gagtggatta ctacaacagg 240  
ctcanagntt annncncaaa aaannnanng ncngnaaaaa attctctnt 289

<210> 69  
 <211> 289  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(289)  
 <223> unsure at all n locations

<400> 69

catcggtaca angnccatgt ncttcattnt gttcacatct tccttgtagc gatgatactc 60  
 gtcgaccgtc acgtcagcgg tggcattgtt acaaggaaga tgtgaacata atgaagaaca 120  
 tgggctttga tgcgtaccga ttttcgatct cttgggtcgag gattttccca gatggaactg 180  
 gcaaggtaaa ccaggaagga gncgattact acaacaggct tcatagatta catgctccag 240  
 caaggtatcg cgccgtatgc aaatctctac cattatgacc tcccattgg 289

<210> 70  
 <211> 278  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(278)  
 <223> unsure at all n locations

<400> 70

ttcagcttag ctagcaangg gnggatcat ggcnacgctt gtcgctnctg ccatgaagca 60  
 acgctgnann ccatnctgtg cnttaggagg cncctagtag ganccaacaa taagagtttc 120  
 tcanggcacc acctnnncgt cttcttctnn atagancagc aagcgcaggt gtaagcttag 180  
 gtttactana cgatctggna gagtaggcag ctcaanatgg agtccaaatg ttngnnaccc 240  
 tcggaaatnn cacaaaggga ntggttcccc tctgattc 278

<210> 71  
 <211> 296  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(296)  
 <223> unsure at all n locations

<400> 71  
 gtggaggcctt gggtagactt cgcggtttgg cttgggtgtac gtggactaca agactctgaa 60  
 gncgtacccc aaggattcag ctttctgggtt caagcatatg ctgtccaaga aaaggagcta 120  
 gagaattgca gacaagagga ccaactggcctt cacgtgtcat acaaaagttc actctgcaaa 180  
 tcctcttagt atgtcagatt tagcttaagg aaccgtgcag acaattgagt ctcaaggctc 240  
 gacatctcta gcttcgttaa ntgttgcaag gcaataaatt ggtatcttcg aaaaaa 296

<210> 72  
 <211> 301  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(301)  
 <223> unsure at all n locations

<400> 72  
 gcaccatctc atcctttctn angnngetgn ngtnaggacg ataccgcnac aagtatcann 60  
 ttgaccagaa ggggaagatt ggaattctnc tggatttcgt gtggnacgaa ccttttagcg 120  
 acagcaatnn ggnncaggct ggagnacanc gagccngacg acnttcacct aggctgggtt 180  
 ccttganncc attgtacatg gncgggtancg tactcgatgc aagagatgag aaagacagct 240  
 accgttggtc agcgatgaag aagccaggat gntgaaaggc tctatagact atgttggcat 300  
 c 301

<210> 73  
 <211> 277  
 <212> DNA  
 <213> Zea mays

<400> 73  
 ccctaacaat gccaccgctg acgtgacggt cgacgagtat catcggtaca aggaagatgt 60  
 gaacataatg aagaacatgg gctttgatgc gtaccgattt tcgatctctt ggtcgaggat 120  
 tttcccagat ggaactggca aggtaaacca ggaaggagtg gattactaca acaggctcat 180  
 agattacatg ctccagcaag gtatcgcgcc gtatgcaaat ctctaccata tgactcccat 240  
 ggcaactccat gaacagtact gggctggcctt agcccaa 277

<210> 74  
 <211> 277  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(277)  
 <223> unsure at all n locations

<400> 74

acaatgctag agtccatnta tctaggtttt atgctggtga aaaacttttg aagtaaaaga 60  
 nagtctgtta gacttgtact tggtcenntt gtcattgcaac attttcagga agatgtcgac 120  
 ctcatgaaaa gtttgaattt tgatgcctac cggtttctna tctcatgggc caggatcttc 180  
 ccagatggcg agggaagagt caatccagaa ggtgttgccct attacaacaa tctgataaac 240  
 tacctgcttc ggaaaggcat tacaccgtac gccaatc 277

<210> 75  
 <211> 311  
 <212> DNA  
 <213> Zea mays

<400> 75

attagcttgg ctagatgagt cactatgaca atgaccgggt ccagtgatgt gctggtctaa 60  
 tcgggatcgt ccggcaagaa aagaaatgaa atcaggtgca ttgaacctga gcttgtcata 120  
 taccaccac atctcaaaat ataaacatat attcatcatc catctacgat gcaattgtat 180  
 gaacgttata ttagtgggtg ttgttgata tattaccatt agagtagtcc aagtgtggtt 240  
 atatatcggg tagttatatc ccaacaacac cccttatatc atcatctata ggcggaaaaa 300  
 gcacaacatt t 311

<210> 76  
 <211> 337  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(337)  
 <223> unsure at all n locations

<400> 76

gactggttcg ccgtgcntca nngnacgtgt atggcattgt cnacgtcgac cgcaanaata 60



antgcacgcg ctaacatgaa ggaatctgcn caagtngttg aaacngttca ncgccgcgac 120  
 agaagnccag cangangntn cttncgcca cttagaaatc ggggnccnca tgatgtggnn 180  
 gcagcccata aacaactggg gtgtngttcg aancgaaaat tntctannnt tnnccgccag 240  
 agaagttnag aggnatactc tccagcacgt ggctaataag cattgtgcca attcatctgg 300  
 ccttgtcagc ntgcataata ngtgctgggt tcctgtt 337

<210> 77  
 <211> 341  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(341)  
 <223> unsure at all n locations

<400> 77  
 cggggcgnga gccggaggtg ancngcgccg acttccccga cggcttcgtc ttcggcgtn 60  
 ctacctantg cgtaccagnt tgaaggagcg agaaggncag ggaggcaaag gagacagcat 120  
 atgggatgta ttacagatg acaaagaaca tgtnttagac agaagcaatg gagaaattgc 180  
 anctgatcac taccatcgat acaaggaaga cattgagctc aggcaagtct aggttttagc 240  
 gcatacagat tttctatata ttgggcgcgt atatttctctg atggctgggn cnnaatgtca 300  
 tgatcaagga gtcgccttct ataataacat catcattann g 341

<210> 78  
 <211> 328  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(328)  
 <223> unsure at all n locations

<400> 78  
 gacttggcag actccttcat gtagcgcggtg cagttattgt tgcggtcgac gtagacaatg 60  
 ccataacgtt cgggtgaagcc ggcgaaactgt tgcttgaggc cattccgcga ancacaactc 120  
 ttacaatatg catgcgccgg ccgacgacga cgcgcgctgc ctctcgtgag cttctgttca 180  
 agtgatgcat gtttcaaggc atccatggat gctttacgta tatgcgtatt aattagccgt 240  
 gtcagggaaac cggacagaag ggggtgttgt tttatatatta cgtcttctgg tgatcaaata 300

aaggggaata tatgttgat gtgtnaat 328

<210> 79  
 <211> 327  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(327)  
 <223> unsure at all n locations  
 <400> 79

gccaaacacg gcgggcgggg cccagcatc tgggacgcct tcatagaggt tcccgggacc 60  
 atccctaaca atgccaccgc tgacgtgacg gtcgacgagt atcatcggta caaggaagat 120  
 gtgaacataa tgaagaacat gggctttgat gcgtaccggg ttcgatcntt ggnnaggatt 180  
 tcccagatgg actggcaagg tgaacccagg aaggagtggg tataccaacc aggtcataga 240  
 tacatgctcc cagcaagtat ccgcgcgtat gncaaannct acattatgac tccattgcnn 300  
 catgacatac tgggtgntta ccaagat 327

<210> 80  
 <211> 295  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(295)  
 <223> unsure at all n locations  
 <400> 80

aaatatatat cgaagaactt ttaacgactt ttagtagntt ccaccaaacg atnttttagct 60  
 ttgnaacggc tcacagccta cagcagctng tnttcatagc tcataacaac tttnttcaca 120  
 gaccaaacag acccatagat ttgtncgtca catcacgttc gtgtatggct ggcctggcg 180  
 tttcatgacc gtcgtttcc tccgccagcg cagtagcgcc gctannnnnnn nnnnnnnnnn 240  
 nnnctgctg gtcgcccact gccagtttcg caccatgttg ttgtacttnt atccg 295

<210> 81  
 <211> 274  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(274)  
 <223> unsure at all n locations

<400> 81

cgcntattgc cacgtcaaga nacgaatggn cctgacggga atcccattgg tccttggnntg 60  
 ggcaatccga ggnnctacct atatcctgaa ggcctaaagg atctgcttat gatcntgaag 120  
 aacaaatncg gaaaccacc catctacatc actgagaacg ggatgggtga cgntgaccat 180  
 gnggatctac ccatggaagn tgcttggtatg accacanaag agtacattac cttcagcgca 240  
 catcgcaact cttaaggagc aagagacttg ngag 274

<210> 82  
 <211> 249  
 <212> DNA  
 <213> Zea mays

<400> 82

cgcggttggt ggccgcccta gggtagcagc acggcaggtt cgcgccgggg aggtgcacgg 60  
 ggtgagaggc cgggggggac tcgggcaccg agccctacgt cgtggcgcac cacctcatcc 120  
 tctccacgc cgccgccgtc cagaggtacc gccgcaggca ccagccgacg cagaggggca 180  
 gggtcgggat cctgctggat ttcgtgtggt acgagcccct cacggcggac tcagccgccg 240  
 accgggcccg 249

<210> 83  
 <211> 287  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(287)  
 <223> unsure at all n locations

<400> 83

ctttcggaga aaagggtaaa aaactggttn accttcaaca agccgaggtg cgtccctngc 60  
 tctgggctac aacaatggct tgcacgcacc ggnaagggtgt cccgggtgcc ccgccggang 120  
 caactcnacn acggagcctt accttgctgc acaacatcct caaccctttc tcatgcaacc 180  
 tgctgtcaag gcnataccgc cnacaagtta tcancttcac caagaaaggg gaaaaattgg 240  
 aaattcncct ggaatttcgt ngtgggtaca aaacctttca anccaaa 287







ctgntatcga aagggattga gccatacntg accntgtacc antggnacnt ccccnaggcc 240  
 ntgaaanaca ggtncacg atggntggac aggcaaata ngtaacaantt ccnagtaacnc 300  
 cnagacatgc ttttaggnct tttgaganac gcgtgagang cnttgnaca ccttnaaaag 360  
 agccacacan ggtccctgca cagggataaa accccgntct annaaa 406

<210> 91  
 <211> 418  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(418)  
 <223> unsure at all n locations  
 <400> 91

actggctctg aacaataagc cctgaatcat ggtctcattc ctacaacagg tcccgcacgc 60  
 atgcaacatg tcctgattct taaaaggaac atgttgatc ccacacaact acaaaccgt 120  
 actatgaaaa tacatttcta attagaccga ggaaaccatg aagatggatg gaagcagaac 180  
 acccaaggag accaaaagg agaccagcaa ggcagggtccg ttcgagggtg ctgaagccga 240  
 accagccggc cggccgcctg aaccagtctg cggggtagca gccttgagc ccgtccccga 300  
 aagcatgtct ctgaaccagt acgccagtc cttggggtag cgcttcagc tcgcgaagtc 360  
 gacgtagacg atgccgaact tggacgtgta gcccgacagc cactngaagt tggttcagg 418

<210> 92  
 <211> 426  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(426)  
 <223> unsure at all n locations  
 <400> 92

cggacnnttg gggtttctctt ggcacatgct actgcngttg caagataccg tacgaaatat 60  
 cagggtctat atatgcttg aagttggaac aatggctgct cagaagggtg aggtcgnaat 120  
 agtcctggac ttcaactggt acgaggctct taaaaactca cctgatgacn aagcatcatc 180  
 ccaaagagcc agggacttcn acattngntg gnntgntgat ccattgataa acggacncta 240

ttnacagata atgcannatc tcgtgnagga gatgctgnct aggttcactn atnaacntgc 300  
 taaactgntg aatnctcggn gactacatct tntcaacgag gacncatcta tntacantaa 360  
 ngggcagaat cttgtcaact ggnncccaat anctctttcn nattgnnnag ttcaatatgt 420  
 tttgga 426

<210> 93  
 <211> 500  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(500)  
 <223> unsure at all n locations

<400> 93

cgaaggnaca gtcccttggt tggaactttg ggctgattat gtgcttggtg ntgtgcgggt 60  
 gggttcgatg ggaagtttac cggtctcttc acgggaaact tacggacnca tacgcatttc 120  
 gaggggccga aggactcttc cacgactacg aagaataaac atggaaattt attcactcat 180  
 actatggaga atggaactgg ggacgccgac attaaggaga tattctcatt tacggaggac 240  
 gttccaaacg atcataaaag gtcagaccat acttagtggt atactgtcat ctccaaggaa 300  
 ctaacagatc cgggactaaa cgcgtaagggt catcctgtcc ggctctcgtc ggataatccc 360  
 gaacggcctg ttggctcctat tgaatgccac ggtaccgctc atgctgattg taataacaat 420  
 cgtatgtgtc atacgaagga gctcgттаag cggccgaaat agcctaattgt tgtgaagaat 480  
 ttaataagaa gacctccatt 500

<210> 94  
 <211> 501  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(501)  
 <223> unsure at all n locations

<400> 94

aagggggggg aggaaagccc ntggtnggac ctttgggctg nttatgtgct tgttatgtgc 60  
 ttgttatgtg cttgnatttg cacaggggtcc gtgcccgatg caacgggctg cgcgttacat 120  
 ggaataactgc cctcggacaa ataggttgaa gaaaggcttc gggataactaa ttcaggacgg 180



cctccagagt tagcggcctg cggcgatcat tttcctctta cgagactacc ggtcagggaa 240  
 tgatcatttc ctctaagga tgagtagaag gagaagtctg ttggccttca caatacgccg 300  
 gggccaaatc atcatattct atggcctctt aaaaatactg acactcnatt aaatcntcta 360  
 ttcgctgcta atatcgatga tgttcatggt agctaagaag ccaatggggt cgatgggaaa 420  
 tttaccggct tcctcacggg aaacntacgg actctacgct ttcgaagggt ccgaaggatc 480  
 ttcacgatac gaaagaataa a 501

<210> 95  
 <211> 464  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(464)  
 <223> unsure at all n locations  
 <400> 95

cgtaatctgg tncgaacnaa tgacaaacat tttcgattga cattgaaagc taccaanaag 60  
 ggngcacgag ttcagctagg atgggntcgc ggaccggttc ttcttcggag actaccnngc 120  
 gacgatncgg gctnngggttg gagagaggct gnccaagntc accgnagacn angctgccct 180  
 tgtcaagggg gccctggact tcatgggcat aaaccactac accactttct acacgaggca 240  
 taactgacac caacatcatc ggacggctgc tgaacnacac tttggcggac accggaacca 300  
 tcancctgcc cttcgacaaa aacggngaag ccattggag atcgggctaa ttcgatatgg 360  
 ctgtacatcg taccagcgg gatcaggaag ctgatgaact atgtcaagga gcggggccaa 420  
 tacccaacgg tttacatnac tgaaaatggg atgggccact gcnc 464

<210> 96  
 <211> 447  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(447)  
 <223> unsure at all n locations  
 <400> 96

ctcaagcact agaanagaag tacttnttta ttcttanata agactcataa caagnngngn 60

aattattaca aaaactngng gtaacgtgtn cttcgacaac tttggtgaca aggtgaagaa 120  
 ttggttgacc tttaatgagc ccnatacatt tacttcattt tcctatggaa ccntnntctc 180  
 tgccccanga cgatgctcac cnntactaga ctgagccatc ccaactggat aattcactcn 240  
 tctnaacctt acattnctgn ccacaacatt cttctagccc annctnaggc tgttnatctt 300  
 tacaacaagt attacaaggn cnaagaacgg ccncataggt cttgcatttg atgtantnan 360  
 tcnttttnna tantcaacat tattttctaga ttaacttttt naantangnt tcatnnacat 420  
 tacttaatta tanttntttt atccttt 447

<210> 97  
 <211> 289  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(289)  
 <223> unsure at all n locations  
 <400> 97

cgatccgtca tggcgactgc tgcgccattg ttnntntccc acggtctcct cctccnccct 60  
 ctccctggcg ctcggcgccc atggcgtaga cgtgaagccc ggggagcacc acatcctcaa 120  
 caggcagagc ttccccccgg gggttcgtctt cggcacggcg tcgtcggcgt accaggtgga 180  
 ggggaacacn cacaggtacg ggcgcggggc ctgcatctgg gacaccttcc tcaagtatcc 240  
 aggcactact cctgataacg cgaccgcgga cgtgacagtc gacgagtac 289

<210> 98  
 <211> 211  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(211)  
 <223> unsure at all n locations  
 <400> 98

ggcgctcggn gcccatggcg tgaacgtgaa gcccggggan caccacatcc tcaacaggca 60  
 gagcttcccc ccgggggttcg tctttgnac ggcgtcgtcg gcgtaccagg tggaggggaa 120  
 cacgcacagg tacgggcgcg ggccctgcat ctgggacacc ttctcaagt atccaggcac 180  
 tactcctgat aacgcgaccg cggacgtgac a 211



<211> 277  
 <212> DNA  
 <213> Zea mays

<400> 101

ggatcagcct ggaaacctca cgcgcgagga gtacgtgcac gacgccgtga ggatcgactt 60  
 ctacaagaac tacctgacgg agctaaagag agggatcgac ggcggcgcgga acgtgatcgg 120  
 ctacttcgcg tggctctctcc tggacaactt cgagtggctg tcgggctaca cgtccaagtt 180  
 cggcatcgctc tacgtcgact tcgcgacgct gaagcgggtac cccaaggact cggcgtactg 240  
 gttcagagac atgcttttcgg ggacgggctc caaggct 277

<210> 102  
 <211> 255  
 <212> DNA  
 <213> Zea mays

<400> 102

gtaccataat ccaatcatca tcatatcgga aaacggaatg gatcagcctg gaaacctcac 60  
 gcgcgaggag tacgtgcacg acgccgtgag gatcgatttc tacaagaact acctgacgga 120  
 gctaaagaga gggatcgacg gcggcgcgaa cgtgatcggc tacttcgctg ggtctctcct 180  
 ggacaacttc gagtggctgt cgggctacac gtccaagtcc ggcatcgtct acgtcgactt 240  
 cgcgacgctc aagcg 255

<210> 103  
 <211> 274  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(274)  
 <223> unsure at all n locations

<400> 103

gcgcactcaa tttggtttta catcgtccca tcgggcatgt atggagtcgt gaacnaccta 60  
 aaggaaaagt accataatcc aatcatcatc atatcggaac acggaatgga tcagcctgga 120  
 aacctcacgc gcgaggagta cgtgcacgac gccgtganga tcgatttcta caagaactac 180  
 ctgacggagc taaagagagg gatcgacggc ggcgcgaacg tgatcggcta ttcgcgtggg 240  
 ctctctggac aattcgagtg gtgtcgggta cacg 274

<210> 104  
 <211> 216  
 <212> DNA  
 <213> Zea mays

<400> 104

tgcaaattgg acagatggcg cactcaattt ggctttacat cgtcccatcg ggcatgtatg 60  
 gagtcgtgaa ctacctaaag gaaaagtacc ataatccaat catcatcata tcggaaaacg 120  
 gaatggatca gcctggaaac ctacgcgcgc aggagtacgt gcacgacgcc gtgaggatcg 180  
 atttctacaa gaactacctg acggagctaa agagag 216

<210> 105  
 <211> 274  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(274)  
 <223> unsure at all n locations

<400> 105

gatcaatcaa tatactacat actacattgc agatcaacaa actcctccgc nggggggnacc 60  
 gagctactcg tccgactggg gcgtccaata ttactttcaa aggaatggcg tgcnaattgg 120  
 acagatggcg cactcaattt ggctttacat cgtcccatcg ggcatgtatg gagtcgtgaa 180  
 ctacctaaag gaaaagtacc ataatccaat catcatcatn tcggaaanacg gaatggatca 240  
 gcctggaaac ctacgcgcgc aggagtacgt gcac 274

<210> 106  
 <211> 254  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(254)  
 <223> unsure at all n locations

<400> 106

gatcaatcaa tatactacat actacattgc agatcaacaa actcctccgc agggaccacc 60  
 gagctactcg tccgactggg gcgtccaata ttactttcaa aggaatggcg tgcaaatngg 120  
 acatatggng cacncaattt ggctttacat cgtcccatcg ggcatgtatg gagtcgtgaa 180

ctacctaaag gaaaagtacc ataatccaat catcatcana ncnggaaagg gtatggntcn 240  
ccnntggaa acct 254

<210> 107  
<211> 189  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(189)  
<223> unsure at all n locations

<400> 107

gggaccaccg agctacnacg tccgacncng ggcgtccaat attactttca aaggaatggc 60  
gtgcaaattg gacagatggc gcacttcaat ttggctttac atcgtcccat cgggcatgta 120  
tggagtcgtg aacncaccta aaggnaaagt accataatcc aatcatcatc atatcggaaa 180  
acggaatgg 189

<210> 108  
<211> 353  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(353)  
<223> unsure at all n locations

<400> 108

cggaaaccca cccatctaca tcaactgagaa cgggatgggt gacgttgacc atggcgatct 60  
acccatggaa gttgccttgg atgaccacaa aagagtacat tacctccagc gccacatcgc 120  
aactcttaag gagtcaagag acttgggagc gaatgtgcag ggctacttcg cttgggtctct 180  
attgacaact tcgaatgggt ctccggctac acggaacgtt acggcatcgt ctatggtgac 240  
cgcaacgatg gctgcaaacg ctacatgaag cggtcagcca agtggttcaa agagttcaat 300  
gctgcgaaga aagcggctgc caagaagatt cttacgccag cttagaatcg ntg 353

<210> 109  
<211> 326  
<212> DNA  
<213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(326)  
 <223> unsure at all n locations

<400> 109

aacccaccca tctacatcac tgagaacggg atgggtgacg ttgaccatgg cgatctaccc 60  
 atggaagttg ccttggatga ccacaaaaga gtacattacc tccagcgnca catcgcaact 120  
 ctttaaggagt caagagactt gggagcgaat gtgcagggtt acttcgcttg gnctctattg 180  
 gacaacttcg aatgggttctc cggctacacg gaacgttacg gcacgtctta tgttgaccgc 240  
 aacgatggct gcaaacgcta catgaagcgg tcagccaagt ggttcaaaga gttcangctg 300  
 cgaagaaagc ggctgccaga agntct 326

<210> 110  
 <211> 256  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(256)  
 <223> unsure at all n locations

<400> 110

catgnatnct acctatatcc tgaaggccta aagganctgc ttatnancat gaagaacaaa 60  
 tacggaaacc caccatcta catcactgag aacgggatgg gtgacgttga ccatggcgat 120  
 ctacccatgg aagttgcctt ggatgaccac aaaagagtac attacctcca gcgccacatc 180  
 gcaactctta aggagtcaag agacttgga gcaaatgtgc agggctactt cgcttggtct 240  
 ctattggaca acttcg 256

<210> 111  
 <211> 278  
 <212> DNA  
 <213> Zea mays

<400> 111

atatggctcc actcgtcgct actgccacga tgaaccacgc tgtggcccat ctgctaggac 60  
 ccaatcatga gagtttctca cggcaccatc tttcttcctc gctgcagcaa aacagtaagc 120  
 gaagggtgtaa tcttagcttc aggccacgag ctgctgagag tcagaatgga agccaaacgc 180  
 tgagccctc ggaagtcctt aaaagagact ggttccctc tgacttcac tttggtgccg 240

ccacttcagc gtaccaaatt gaaggtggat ggaacgag 278

<210> 112  
<211> 274  
<212> DNA  
<213> Zea mays

<400> 112

atatggctcc actcgtcgct actgccacga tgaaccacgc tgtggcccat ctgctaggac 60  
ccaatcatga gagtttctca cggcaccatc tttcttcctc gctgcagcaa aacagtaagc 120  
gaaggtgtaa tcttagcttc aggccacgag ctgctgagag tcagaatgga agccaaacgc 180  
tgagcccctc ggaagtcctt aaaagagact ggttcccctc tgacttcacg tttggtgccg 240  
ccacttcagc gtaccaaatt gaaggtggat ggaa 274

<210> 113  
<211> 232  
<212> DNA  
<213> Zea mays

<400> 113

atatggctcc actcgtcgct actgccacga tgaaccacgc tgtggcccat ctgctaggac 60  
ccaatcatga gagtttctca cggcaccatc tttcttcctc gctgcagcaa aacagtaagc 120  
gaaggtgtaa tcttagcttc aggccacgag ctgctgagag tcagaatgga agccaaacgc 180  
tgagcccctc ggaagtcctt aaaagagact ggttcccctc tgacttcacg tt 232

<210> 114  
<211> 233  
<212> DNA  
<213> Zea mays

<400> 114

atatggctcc actcgtcgct actgccacga tgaaccacgc tgtggcccat ctgctaggac 60  
ccaatcatga gagtttctca cggcaccatc tttcttcctc gctgcagcaa aacagtaagc 120  
gaaggtgtaa tcttagcttc aggccacgag ctgctgagag tcagaatgga agccaaacgc 180  
tgaggggcct cggaagtccc taaaagagac tggttcccct ctgacttcac ctt 233

<210> 115  
<211> 162  
<212> DNA



<213> Zea mays

<220>

<221> unsure

<222> (1)...(162)

<223> unsure at all n locations

<400> 115

gagagagaaa aaatatggct ccactcgctg ctactgccac gatgaaccac gctgtggccc 60

atctgctagg acccaatcat gagagtttct cacggcacca tctttcttcc tcgctgcagc 120

aaaacagtaa gcgaaggtgt aatcttagct tcaggccang ng 162

<210> 116

<211> 233

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(233)

<223> unsure at all n locations

<400> 116

taccaaggct ggtagggccc aaaaattgtg gacatatttg ctgactatgc tgatttttgc 60

ttcaagactt ttggcaatcg agtcaagaac tggttcacat taaatgagcc aaggatagta 120

gcattccttg gttatgataa agggcttaac cccctaacc ggtgcacaca atgcactgcc 180

ggtgggaact catcgacaga accttacatt gttgttcata acattcncct atc 233

<210> 117

<211> 349

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(349)

<223> unsure at all n locations

<400> 117

ggaagatggt gatctcatga gaagcctaaa ttngatgca taccggtttt caatctcctg 60

gtccaggatc ttcnccagat ggcgaaggga naattaatna cgaaggagta caatatnaca 120

acaatcttat agactacatg gttaagcaag gccttactcc ttacgccaac cttaaccact 180

atgatcttcc gcttgcgctt cagaagaagt accaaggctg gtagggcca aaaattgtgg 240

acatatattgc tgactatgct gatttttgggt tcaagacttt tggcatcgag tcaaganctg 300  
gttcacatna attgagccaa ggatagtagc attccttgggt tatgataac 349

<210> 118  
<211> 203  
<212> DNA  
<213> Zea mays

<400> 118

taaccactat gatcttccgc ttgcgcttca gaagaagtag caaggctgggt taggccccaa 60  
aattgtggac atatttgctg actatgctga tttttgtttc aagacttttg gcaatcgagt 120  
caagaactgg ttcacattaa atgagccaag gatagtagca ttccttgggt atgataaagg 180  
gcttaacccc cctaaccgggt gca 203

<210> 119  
<211> 303  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(303)  
<223> unsure at all n locations

<400> 119

gattactaca acaggctcat agattacatg ctccagcaag gtatcgcgcc gtatgcaaatt 60  
ctctaccatt atgacctccc attggcactc catgaacagt acctgggctg gcttagccca 120  
aagattgtgg aggcgtttgc agactacgcc gagttctgcn tccacgcggt cggagacagg 180  
gtgaagaact gggtttacott caacgagccg aggtgcgtcg ctgntctggg ctacgaacat 240  
ggcttgcacg caccgggaag gtgttccgggt gccccgccgg agcaactcca ccacgggnanc 300  
gta 303

<210> 120  
<211> 220  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(220)  
<223> unsure at all n locations

<400> 120



<400> 123  
 ggacttcaac acgctcgaac gccacccgaa ggcgtcggcc tactggttca gggacatgct 60  
 tcagaagcat tgagatctcc aganccgagc ctgagcacgg aaggtagcat tttgttcagc 120  
 ttgccttagt gtttgggatg gcccaatggt tcaaatacgg ctcaagtgcct ggctacacaa 180  
 atgggaacaa aggacagcta ccccgatcaa ttgtgatggt gtgtgtttgt ggggt 234

<210> 124  
 <211> 314  
 <212> DNA  
 <213> Zea mays

<400> 124  
 cactgggaca cgcctcaagc actggtagac aagtacgggtg gcttttttaga tcggaggatt 60  
 gtaaaagatt acacagatctt cgctatgggtg tgcttcgaga acttcgggtga caaagtgaac 120  
 aattgggtga catttaacga gcccacaaacg ttttcttctt tttcctatgg aatcggggtg 180  
 tgtgccccag ggcgggtgctc cccaggacaa aaatgtgcta acccaattgg aaactcactt 240  
 atcgagccat acattgttgg tcacaacctt ctctagccc atgctgaggc tgttgatctt 300  
 tacaacaagc atta 314

<210> 125  
 <211> 261  
 <212> DNA  
 <213> Zea mays

<400> 125  
 attgtaaaag attacacaga ctctgctaag gtgtgctttg agaacttcgg tgataaagta 60  
 aacaattggt tgacctttta tgagcccaaa acgttttctt ctttttcata cggaaccggg 120  
 ctatgcgccc cagggcggtg cccccagga caaaaatgtg ctaaccat tggaactcg 180  
 ctactgagc catacactgt tggccataac cttctccgag cccacgctga ggctgttgat 240  
 ctttacaaca agtattacaa g 261

<210> 126  
 <211> 222  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure



caggcgatgt aaactgcgga tcagtatcat aagtacaagg accaacgtaa aagctttctt 360  
gcatagaaga tgggtggctg aatgcctac ccgcatgtcg aattggcccc cc 412

<210> 129  
<211> 306  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(306)  
<223> unsure at all n locations

<400> 129

gagactagac ccgctagctg angccgggcg gcgcgctgga cacgaacatg atggggagaa 60  
aggcgctcgg ctgtgctcct cttctcctcc tcttgncgc cgcgctcgt ccggccgagc 120  
tcagcgctcg gggcggcggc tgcctcgggc gcggtcaccg gggccgactt ccccgcgggg 180  
ttcgtcttcg gcgtcgggtc ctccgggtac cagtcgaagg tgcngttgca gaggacggaa 240  
ggaagcctag catctgggac acnttcacac atgaaggcta ttcccttgac aacgccacag 300  
gcgntg 306

<210> 130  
<211> 318  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(318)  
<223> unsure at all n locations

<400> 130

gnanatgaga ngaganacta gacccgctag ctgangccgg gcggcgcgct ggacacgaac 60  
atgatgggga gaanngcgt cggctgtgct cctcttctcc tcctcttggc cgcnccgtc 120  
gctccggcgg anctcagcgt cgggncggcg gctgcctcgg gcgcggtcac cggggccgac 180  
ttccccncng ggttcgtctt cngcgtcggc tcctccgct accaggtcga aggtgcagtt 240  
gcagaggacg gaaggaagcc tagcatcttg nacacattca cacatgaang ctattcncca 300  
gacaacgcta natggatg 318

<210> 131



agctatgtc 189

<210> 134  
<211> 158  
<212> DNA  
<213> Zea mays

<400> 134

ggcatgttgg ttttgtctac gaacgaaatg gagttcctat tggcgctcac gcaaactcct 60

actggctgta cattgtgccg tggggcatca acaaggctgt cagctatgtc aaggaaactt 120

acaaaaatcc tacaatgatc cttgctgaaa acggaatg 158

<210> 135  
<211> 262  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(262)  
<223> unsure at all n locations

<400> 135

gtcagctacc aggatgattg gcatgttggg ttggccacgg aacggaaaat ggagttccta 60

attggcgctc acggcaacnc cctatggctg taacattgtg ccgtggggca tcaacaaagg 120

ctgtcagcta atgtcnagga aactttacca aaaatcctac aatgacctt gctgaaaacg 180

gaatggacca actggtgatg tcagtattac tcagggtgtg catgacacag taagaatcgg 240

tattacagag actacataac tg 262

<210> 136  
<211> 476  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(476)  
<223> unsure at all n locations

<400> 136

acgcgtacag attctccatc tcttgggtcca gaatactgcc gaagggaacg ctcgaaggag 60

ggattaatca ggccggcatc aagtactaca aaaagctcat caacttattg atagagaacg 120

gaatagagcc atttgaaca atttttcatt gggacgtccc tcaagcactg gaagacaagt 180



acggtggcct tttaggcgac aggattgtaa aggattacac agacttcgct aaggtgtgct 240  
 ttgagaactt cggtgacaag gtgaagaatt ggttgacctt taacgagcca cagacattta 300  
 caaccttttc gtacggaacg ggagtttttg cccctggacg gtgctcacca ggagaaaaat 360  
 gtgctcagcc tattgctaac tctctcaccg aaccatacat tgggtggccac aacatncttn 420  
 gagcccacgc tatgactggg gacntntaca acaagaatta caagggttca gacggc 476

<210> 137  
 <211> 486  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(486)  
 <223> unsure at all n locations

<400> 137  
 cgctcgaagg aggtattaat caggccggca tcaagtacta caaaaagctc atcaacntat 60  
 tgatagagaa cggaatagag ccatttgtaa caatttttca ttgggaccgt ccctcaagca 120  
 ctggaagaca agtacgggtg ctttttaggc gacaggattg taaaggatta cacagacttc 180  
 gctaagggtg gctttgagaa cttcgggtgac aaggtgaaga attgggtgac cttaaacgag 240  
 ccacagacat ttacaacctt ttcgtacgga acgggagttt ttgcccctgg acggtgctca 300  
 ccaggagaaa aatgtgctca gcctattgct aactcactca ccgaaccata cattgctggc 360  
 cacaacatcc ttcgagccca cgctatgact gttgacctct acaacaagaa ttacaagggt 420  
 cagacggggc gcattggggt tgcgtttgac gtaatgggtc gcggtgccat atggaaatca 480  
 tttctt 486

<210> 138  
 <211> 442  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(442)  
 <223> unsure at all n locations

<400> 138

acgcgtacag attctccatc tcttggtcca gaatactgcc gaagggaacg ctcgaaggag 60

gtattaatca ggccggcatc aagtactaca aaaagctcat caacttattg atagagaacg 120  
 gaatagagcc atttgtaaca atttttcatt gggacgtccc tcaagcactg gaagacaagt 180  
 acggtggcctt tttaggcgac aggattgtaa aggattacac agacttcgct aaggtgtgct 240  
 ttgagaactt cggtgacaag gtgaagaatt ggttgacctt taacgagcca cagacattta 300  
 caaccttttc gtacggaacg ggagtttttg cccctggacg gtgctcacca ggagaaaaat 360  
 gtgctcagcc tattgctaac tcactcaccg aaccatacat tgctggccac aacattcttn 420  
 gagcccacct tttgactggg ga 442

<210> 139  
 <211> 410  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(410)  
 <223> unsure at all n locations  
 <400> 139

tgcggatgtc agattgctaa aggaaatagg catgggcnng tacagattct cctcnnttg 60  
 gtccagaata ctgccgaagg gaacgctcga aggaggtatt aatcaggccg gcatcaagta 120  
 ctacaaaaag ctcatcaact tattgataga gaacggaata gagccatttg taacaatttt 180  
 tcattgggac gtccctcaag cactggaaga caagtacggt ggcttttttag gcgacaggat 240  
 tgtaaaggat tacacagact tcgctaaggt gtgctttgag aacttcggtg acaagggtgaa 300  
 gaattgggtg acctttaacg agccacagac atttacaacc ttttcgtacc ggaacgggag 360  
 tttttgcccc tggacagtgc tnaccaggag aaaaaatgtg ctcagnctat 410

<210> 140  
 <211> 439  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(439)  
 <223> unsure at all n locations  
 <400> 140

ctcaagcact ggaagacaag tacgggtggct ttttaggcga caggattgta aaggattaca 60  
 cagacttcgc taagggtgtgc tttgagaact tcggtgacaa ggtgaagaat tggttgacct 120

ttaacgagcc acagacattt acaacctttt cgtacggaac gggagttttt gcccctggac 180  
 ggtgctcacc aggagaaaaa tgtgctcagc ctattgctaa ctactcacc gaaccataca 240  
 ttgctggcca caacatcctt cgagcccacg ctatgactgt tgacctctac aacaagaatt 300  
 acanggggtac agacggnccg cattgggctt gcgtttgacg taatgggtcg cgtgccatat 360  
 ggaaatacat ttctcgatga acaggcccag gaaaggctct tngatcaaaa cctangatgg 420  
 ttcttttggan cctgtggtc 439

<210> 141  
 <211> 326  
 <212> DNA  
 <213> Zea mays  
 <400> 141

gattactgaa ggaaataggg atggactcct ataggttctc catctcttgg tccagaatac 60  
 tgccgaatgg cacactcgaa ggaggtatta atccatatgg catcaagtac tacaaaaatc 120  
 tcatcaactt gttggtagag aacggcatag agccatttgt gacaattttc cactggggaca 180  
 cgctcaagc actggtagac aagtatggtg gctttttaga tgagaggatt gtaaaagatt 240  
 acacagactt cgctaaggtg tgctttgaga acttcggtga taaagtaaac aattggttga 300  
 cctttaatga gcccacaacg ttttct 326

<210> 142  
 <211> 414  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(414)  
 <223> unsure at all n locations  
 <400> 142

gtaaaggatt acacagactt cgctaaggtg tgctttgaga acttcggtga caagggtgng 60  
 aattggttga cctttaacga gccacagaca tttaacaacct tttcgtacgg aacggggagtt 120  
 tttgcccctg gacggtgctc accaggagaa aaatgtgctc agcctattgc taactcactn 180  
 accgaaccat acattgctgg ccacaacatt cttegagccc acgctatgac tgttgacctt 240  
 tacaacaaga attacaaggg tacanaacgn cccattgggc ttgcgtttga cctaattgggt 300  
 ccgggccata ntggaaatac atttntngat taanaaggcc angaaagggg ccttgantca 360

aaaacctaga ttgttcnttg aacctntggt cctggngant tacccttttt tatt 414

<210> 143  
<211> 420  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(420)  
<223> unsure at all n locations

<400> 143

aggacccagg gctctnatng atagagancn gaatntaagc catttgtaac aattcancag 60  
ggggnggggtc catcaancac tggaagacaa gtacggnggc tttttaagcg acaggatacg 120  
taaaggatta cacagacttc gctaagggtgt gctttgagaa ctncggtgac aaggngaaga 180  
attggttgac ctttaacgag ccacagacat ttacaacctt tncgtacgga acgggagitt 240  
ttgcccctgg acggtgctca ccaggagaaa aatgtgctca ncctattgct aactcactca 300  
ccgaaccata cattgctggc cacaacatcc ttcgagccca cnctatgact gttgacctnt 360  
acaacaagaa ttacaagggt tcanacggcc gcattgggct tgcgtttgac ntaatgggtc 420

<210> 144  
<211> 419  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(419)  
<223> unsure at all n locations

<400> 144

aggacgcgtg ggcttatnga tagagaacgg aatagagcca tttgtaacaa tttttcatgg 60  
ggancgtccn tcaagcactg gaagacaagt acggtggctt tttangcgac aggattgtaa 120  
aggattacac agacttcgct aangtgtgct ttgagaactt cggtgacaag gtgaagaatt 180  
ggttgacctt taacgagcca cagacattta caaccttttc gtacggaacg ggagtttttg 240  
cccctggacg gtgctcacca ggagaaaaat gtgctcance tattgctaac tcactcaccg 300  
aaccatacat tgctggccac aacatccttc gagccacgc tatgactggt gacctntnac 360  
aacaagaatt acaaggggta cagacgggcg gattgggctt gcgtttggac gtaatgggt 419

<210> 145  
 <211> 262  
 <212> DNA  
 <213> Zea mays

<400> 145

gtccagaata ctgccgaagg gaacgctcga aggaggtatt aatcaggccg gcatcaagta 60  
 ctacaaaaag ctcatcaact tattgataga gaacggaata gagccatttg taacaatttt 120  
 tcattgggac gtccctcaag cactggaaga caagtacggg ggcttttttag gcgacaggat 180  
 tgtaaaggat tacacagact tcgctaagggt gtgctttgag aacttcgggtg acaagggtgaa 240  
 gaattgggtg acctttaacg ag 262

<210> 146  
 <211> 188  
 <212> DNA  
 <213> Zea mays

<400> 146

cagacttcgc taagggtgtgc tttgagaact tcggtgacaa ggtgaagaat tggttgacct 60  
 ttaacgagcc acagacattt acaacctttt cgtacggaac gggagttttt gcccttgac 120  
 ggtgctcacc aggagaaaaa tgtgctcagc ctattgctaa ctcactcacc gaaccatata 180  
 ttgctggc 188

<210> 147  
 <211> 442  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(442)  
 <223> unsure at all n locations

<400> 147

gggaaatcca tggatctaca tgtaccctaa aggccataag gatctcctta tgatcatgaa 60  
 gaacaaatac ggaaacccgc ctatctatat caccgagaac ggaatcgggg acgttgacac 120  
 aaaggataat cctctatcca tgcaagatgc gttggacgac tacaagaggc tagattacct 180  
 ccagcgccac atctcagtta tcaaagaatc aatagacttg ggggcggacg tgcgcggcca 240  
 cttcacatgg tctctgttgg acaacttcga gtgggtctagt ggctacaccg agcggttacgg 300





<210> 152  
 <211> 246  
 <212> DNA  
 <213> Zea mays

<400> 152

cgcctatcta tatcaccgag aacggaatcg gggacgttga cacaaaggac aatcctctat 60  
 ccatgcaaga tgcgttggag gactacaaga ggctagatta cctccagcgc cacatctcag 120  
 ttattaaaga atcaatagac ttgggggacgg acgtgcgcgg ccacttcaca tggctctctgt 180  
 tggacaactt cgagtgggtct agtgggtaca ccgagcgtta cggcatcatc tacgtcgacc 240  
 gtgacg 246

<210> 153  
 <211> 320  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(320)  
 <223> unsure at all n locations

<400> 153

cccggncga cntccccgcg gggttcgtct tcnegctcgg cncnccccgc gtaccagnnc 60  
 cgaaggtgca gttgcagagg acggaaggaa gcctagcatc tgggacacat tcacacatga 120  
 aggctatncc cttgacaacn ccacaggcga tgtaacnncg gatcagtatc ataagtacaa 180  
 ggacgacgta aagcttctgc atgagatnng tgctgatnnc ctaccggatg tcgattncct 240  
 ggcctcgact tatcccagat ggtcggggag ccgtgaatcc gaagngctgg agtatnacaa 300  
 caatctcata gatgagtcct 320

<210> 154  
 <211> 301  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(301)  
 <223> unsure at all n locations

<400> 154

acgacaaaag caaagcaaag cagcncaaaa aagtttagcc agctagcaag acatggctcc 60



acttgttgct gctgccacga atgcacactg cccatagaag ccacatagta ggacccaaca 120  
atgagaattht tccaaggcac caaccttggt catcacaaaa cagaaacaag agactcaggc 180  
ttaggtcacg agcaciaaagg ataagcagtc agctgcttgc aagccgaaag cttatggccc 240  
tgggcaaath ccctaanagg ggatggthtt cctcctagct tcathcttggg ggcgggccacg 300  
c 301

<210> 155  
<211> 266  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(266)  
<223> unsure at all n locations

<400> 155  
angcanagcg ttcaggatan acathngctgc cacctttgcc ttcathnctc tccngctacn 60  
ggctctgcgc cagagcgcg cncntgttcn tcggcttcac aaggagcgag tncctgaag 120  
ntttcgtcnt cggatccgcn acnncggctt atcagtatga nggtgctgtn ggtgaggatg 180  
gtaggagccc aagcatctgg gacaccttca ctcacgcagg ganaathnccg gacaaaagca 240  
atgggtgatgt agccgcccgc nggtac 266

<210> 156  
<211> 238  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(238)  
<223> unsure at all n locations

<400> 156  
gaacgctggg tcgacccanc ggcgtccgct tctgcttgte aatcgggggt tcagcttagt 60  
ttggaggggtg tangagttga ttcagctcgg tttggatgnc actaagattg aaggagcgag 120  
aaggagggga ggcaaaggag acagcatatg ggatgtatth acagatgaca aagaacatgt 180  
cttagacaga agcaatggag aaattgcagt tgatcactac catcgatata aggaagac 238

<210> 157

<211> 233  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(233)  
<223> unsure at all n locations

<400> 157

cagacgcgtg ggtcgaccan cgcgtccgct tctgcttgct aatcgggggt tcagcttagt 60  
ttggaggggtg tggagttgat tcagctcggg ttggatggac taagattgaa ggagcgagaa 120  
gggagggagg caaaggagac agcatatggg atgtatttac agatgacaaa gaacatgtct 180  
tagacagaag caatggataa attgcagttg atcactacca tcgatacaag gaa 233

<210> 158  
<211> 462  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(462)  
<223> unsure at all n locations

<400> 158

caaggagaca cctctaccca tggaggatgc cttaaagac tacaaaaggc tagattacat 60  
cnagcgccac atcgctactc ttaaggaatc aatagacttg ggatcaaagtg tgcaaggcta 120  
cttcgcttgg tctctgctgg acaactttga atggttcgcc ggcttcaccg aacgttatgg 180  
cattgtctac gtcgaccgca acaataactg cacgcgctac atgaaggagt ctgccaaagt 240  
gttgaacag ttcaacgccg cgaagaagcc cagcaagaag attcttacgc cagcttagaa 300  
atcggggggcc tcatgatgtg ggtgcagccc ataaaaaact ggtgtgtggt ttcgaaccga 360  
aaattttctg tttttttccg ccacgagagg ttctggaggc atactctcca gcaccgtggc 420  
taataacgca ttgttccaat tcagtctggc cttgtcatgc at 462

<210> 159  
<211> 463  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(463)

<223> unsure at all n locations

<400> 159

gtgctttgat aacttcggcg acaaggtgaa gaattgggtg acctttaatg agccccagac 60  
 attnncttcc ttttcctacg gaactggggg ctttgcccca ggctcgtgct cacctggact 120  
 agactgtgcc tacccaactg ggaattcact cgtcgcgcct tacactgctg gccataacat 180  
 tctcctagcc cacgctgagg ctggtgatct ttacaacaag cattacaagc gcgacgacac 240  
 ccgcataggg cttgcgtttg acgtaatggg tcgtgtgcca tacggaacat cgtttcttga 300  
 taaacaggcc gaagaaaagg cctgggacat caacctagga tggttcttag agccagtggg 360  
 tcgtggtgac tacccttctt ccatgagatc attggctagg gaacgactac ctttcttcaa 420  
 ggacgagcag aaggagaagc tcgccggntc ctataacatg ttg 463

<210> 160

<211> 466

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(466)

<223> unsure at all n locations

<400> 160

gcgagaacgg ccgcataggt cttgcatttg atgtaatggg tcgtgtgcca tacggaacat 60  
 catttctaga tgaacaggcc aaagaaagg ccatggacat taacctagga tggttcttgg 120  
 agcctgtggg tcgtggtgac tacccttctt caatgagatc gttagcgagg gaacgactac 180  
 ctttcttcag tgacaaacag caagagaagc ttgtgggac cctataacatg ttgggaataa 240  
 actactacac ctcaatatc tccaaacata tcgacatctc accaaaatac tcgcctgttc 300  
 tcaacactga cgacgcctac gctagtcaag aaacgtatgg gcctgacggg aaaccattg 360  
 gtccnctat gggaaatccg tggatctact tataccaga aggcctaaag gatatcctta 420  
 tgatcatgaa gaacaaatat gggaaacccc acctatctac atnact 466

<210> 161

<211> 441

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(441)  
<223> unsure at all n locations

<400> 161

agattacaca tacttttgcta aggtgtgctt tgataacttc ggcgacaagg tgaagaanng 60  
gtggaccttt aatgagcccc agacatttac ttccttttcc tacggaactg gggctcttgc 120  
cccaggctcg tgetcacctg gactagactg tgcctaccca actgggaatt cactcgtcga 180  
gccttacact gctggccata acattctcct agcccacgct gaggtctgtg atctttacaa 240  
caagcattac aagcgcgacg acaccgcgcat agggcttgcg tttgacgtaa tgggtcgtgt 300  
gccatacgga acatcgtttc tggataaaca ggccgaagaa aggtcctggg acatcaacct 360  
aggatgggtc ttagagccag tgggtcgtgg tgactacccc ttctccatga gatcattggc 420  
tagggaacga ctacccttct t 441

<210> 162  
<211> 444  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(444)  
<223> unsure at all n locations

<400> 162

caccaaacta ctcacctgtg ctcaacactg acgacgccta cgccagtcaa gaagttaacg 60  
gggctgacgg gaagcccatn ggtcctccta tgggaaatcc atggatctac atgtaccctg 120  
agggttgaa ggatctcctt atgatcatga agaacaaata cggaaacca cctatctaca 180  
tcacggagaa cggaatcggg gatgttgata ccaaggagac acctctaccc atggaggatg 240  
ccttaaatga ctacaaaagg ctagattaca tccagcgcca catcgctact cttaaggaat 300  
caatagactt gggatcaa atgtgcaaggct acttcgcttg gtctctgctg gacaactttg 360  
aatggttcgc cggcttcacc gaacgttatg gcattgtcta cgtcgaccgn aacaataact 420  
gnacgcgcta catgaangag tctg 444

<210> 163  
<211> 470  
<212> DNA  
<213> Zea mays

<220>

<221> unsure  
 <222> (1)...(470)  
 <223> unsure at all n locations  
 <400> 163

ctcacctgtg ctcaacactg acgacgcctt tnccagtcna gaagttaacg ggcttgacgg 60  
 gaagcccatt ggtcctccta tgggaaatcc atggatctac atgtaccctg agggcttgaa 120  
 ggatctcctt atgatcatga agaacaata cggaaaccca cctatctaca tcacggagaa 180  
 cggaatcggg gatgttgata ccaaggagac acctctaccc atggaggatg ccttaaata 240  
 ctacaaaagg ctagattaca tccagcgcca catcgctact cttaaggaat caatagactt 300  
 gggatcaaata gtgcaaggct acttcgcttg gtctctgctg gacaactttg aatgggtcgc 360  
 cggcttaccg gaacgttatg gcattgtcta cntcgaccg aacaatnact gnacgcgcta 420  
 catgaangag tctgccaagt ggggtgaaaca gttcaacgnc nccnaaaaaa 470

<210> 164  
 <211> 435  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(435)  
 <223> unsure at all n locations  
 <400> 164

tanacaatgc cataacgttc ggtgaagccg gcgaaccatt caaagttgtc cagcagagac 60  
 caagcgaagt agccttgac atttgatccc aagtctattg attccttaag agtagcgatg 120  
 tggcgctgga tgtaatctag ccttttgtag tcatttaagg catcctccat gggtagaggt 180  
 gtctccttgg tatcaacatc ccgattccg ttctccgtga tgtagatagg tgggtttccg 240  
 tatttgttct tcatgatcat aaggagatcc ttcaagccct cagggtacat gtagatccat 300  
 ggatttccca taggaggacc aatgggcttc ccgtcaggcc cgtaacttc ttgactggcg 360  
 taggcgtcgt cagtgttgag cacagggtgag tagtttggtg agatatcgat gtttttgag 420  
 aaccgtgagg tgtat 435

<210> 165  
 <211> 459  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(459)  
 <223> unsure at all n locations

<400> 165

cagaaggaga agctcgccgg ttcctataac nttgtnggtn gttaaactac tacacctcac 60  
 ggggntccga aaacatcgat atctcaccaa actactcacc tgtgctcaac actgacgacg 120  
 cctacgccag tcaagaagtt aacgggcctg acgggaagcc cattggtcct cctatgggaa 180  
 atccatggat ctacatgtac cctgagggct tgaaggatct ccttatgatc atgaagaaca 240  
 aatacggaaa cccacctatc tacatcacgg agaacggaat cggggatggt gataccaagg 300  
 agacacctct acccatggag gatgccttaa atgactacaa aaggctagat tacatccagc 360  
 gccacatcgc tactcttaag gaatcaatag acttgggatc aaatgtgcaa ggntacttcg 420  
 cttggnctct gctggacaac tttgaatggg ttcgccggc 459

<210> 166  
 <211> 466  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(466)  
 <223> unsure at all n locations

<400> 166

aagggaattt tnattgaatg ctctaccggt ccggaattcc cggggtagaa gattacacat 60  
 actttgctaa ggtgtgcttt gataacttcg gcgacaaggt gaagaattgg ttgacnttta 120  
 nggagcccca gacattnact tccttttcct acggaactgg ggtctttgcc ccaggtcggt 180  
 gctcacctgg actagactgt gcctacccaa ctgggaattc actcgtcgag ccttacactg 240  
 ctggccataa cattctccta gcccacgctg aggctgttga tctttacaac aagcattaca 300  
 agcgcnacga caccgcata gggcttgctg ttgacgtaat gggtcgtgtg ccatacggaa 360  
 catcgtttct ggataaacag gccgaanaaa ggtcctggga catcaaccta ggatggttct 420  
 tagagccagt ggttcgtggt gactaccctc tctccatgag atcatt 466

<210> 167  
 <211> 478  
 <212> DNA  
 <213> Zea mays

[illegible]

gatgttgata	ccaaggagac	acctctaccc	atggaggatg	ccttaaataga	ctacaaaagg	60
ntagattnca	tccagcgcca	catcgctact	cttaaggaat	caatagactt	gggatcaaat	120
gtgcaaggct	acttcgcttg	gtctctgctg	gacaactttg	aatggttcgc	cggcttcacc	180
gaacgttatg	gcattgtcta	cgtcgaccgc	aacaataact	gcacgcgcta	catgaaggag	240
tctgccaaagt	ggttgaaaca	gttcaacgcc	gcgaagaacc	cagcaagaag	attcttacgc	300
cagcttagaa	atcggggggc	tcgatgatgtg	ggtgcagccc	ataaaaaact	ggtgtgtggg	360
ttggaaccga	aaattttctg	gttttttccg	nccgagaggg	tctggangca	tactnttcaa	420
cacccgnggc	taataacgca	ttggttncaat	tcaatctggc	cttgtcatgc	ctgcaata	478

```
<220>
<221>      unsure
<222>      (1)...(447)
<223>      unsure at all n locations
```

ctcaagcact	agaagagaag	tacggcggat	tcttagataa	gactcataag	aggnttggaa	60
atgattacaa	aaacttcgct	aagggtgtgct	tgcacaactt	tggtgacaag	gtgaagaatt	120
ggttgacctt	taatgagccc	cagacattta	cttcattttc	ctatggaacc	ggggtctttg	180
ccccaggacg	atgctcaccg	ggactagact	gtgccatccc	aactgggaat	tcactcgtcg	240
aaccttacat	tgetggccac	aacattcttc	tagcccacgc	tgaggctgtt	gatctttaca	300
acaagtatta	caagggcgag	aacggnccgc	ataggtcttg	catttgatgt	aatgggtcgt	360
gtgccatacn	gaacatcatt	tctagatnaa	caggcccaan	naagggccct	ngacattaac	420
ctangatggn	tentngganc	ctgtgnt				447

<210>	169
<211>	454
<212>	DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(454)

<223> unsure at all n locations

<400> 169

```
cgtacgcgcg agctnggnct ntggcgtttg cccatttcg gtntcacct ggactagact 60
gtgcctnccc angtgggaat tcactcgtcg agccttacac tgctggccat aacattctcc 120
tagcccacgc tgaggctggt gatctttaca acaagcatta caagcgcgac gacacccgca 180
tagggccttg gtttgacgta atgggctcgtg tgccatacgg aacatcgttt ctggataaac 240
aggccgaaga aaggctcctgg gacatcaacc taggatgggt cttagagcca gtggttcgtg 300
gtgactaccc cttctccatg agatcattgg ctagggaacg actacccttc ttcaaggacg 360
agcagaagga gaagctcgcg gtcctataac atgttggggg taaactacta cacctcacgg 420
ttctcaaaaa catcgatatc tcaccaaact actc 454
```

<210> 170

<211> 439

<212> DNA

<213> Zea mays

<400> 170

```
cgctgaggct gttgatcttt acaacaagca ttacaagcgc gacgacaccc gcatgggggt 60
tgcgtttgac gtaatgggtc gtgtgccata cggaacatcg tttctggata aacaggccga 120
agaaagggtc tgggacatca acctaggatg gttcttagag ccagtgggtc gtggtgacta 180
ccccttctcc atgagatcat tggctaggga acgactaccc ttcttcaagg acgagcagaa 240
ggagaagctc gccggttcct ataacatggt ggggttaaac tactacacct cacggttctc 300
caaaaacatc gatatctcac caaactactc acctgtgctc aacacttgac gacgcctacg 360
ccagtcaaga aagttaacgg gcctgacggg aagcccatcg gtccttctat gggaaatcca 420
tggtatctaca tgtaccctg 439
```

<210> 171

<211> 434

<212> DNA

<213> Zea mays

<220>

<221> unsure



<222> (1)...(434)  
<223> unsure at all n locations

<400> 171

gcattgtaga agattacaca tacttttgcta aggtgtgctt tgataacttc ggcgacnngg 60  
tgaagaattg gttgaccttt aatgagcccc agacatttac ttccttttcc tacggaactg 120  
gggtctttgc cccaggtcgg tgctcacctg gactagactg tgcctacca actgggaatt 180  
cactcgtcga gccttacact gctggccata acattctcct agcccacgct gaggctgttg 240  
atctttacaa caagcattac aagcgcgacg acaccgcgat agggcttgcg tttgacgtaa 300  
tgggtcgtgt gccatacnga acatcgtttc tggataaaca ggccgaanaa aggtctgggg 360  
acatcaacct aagatggttc ttaaaaccan tgggtngtng ngactacccc ttcttcatgg 420  
aattttnggg ttgg 434

<210> 172  
<211> 464  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(464)  
<223> unsure at all n locations

<400> 172

gtacatncag cgccacatng ctactcttaa gggttcaata gacttgggat caaatgtgca 60  
agggtncctc gcttggcttc tgctggacaa ctttgaatgg ntcgccggct tcaccgaacg 120  
ttatggcatt gtctacgtcg accgcaacaa taactgcacg cgctacatga aggagtctgc 180  
caagtgggtg aaacagttca acgcccgnaa gaancccagc aagaagattc ttacgccagc 240  
ttagaaatcg ggggcctcat gatgtgggtg cagnccataa aaaactggtg tgtgggttgg 300  
aaccgaaaat tttctggntt tttccnccac gagaggttct ggaggcatac tctccaacac 360  
cgtggctaata aacgcattgg tccaattcaa gctggccttg catgcatgca ataaataaag 420  
tgatgggttt ncctggttca aaaaacntan naaaaaaagg gggg 464

<210> 173  
<211> 426  
<212> DNA  
<213> Zea mays

<400> 173



aggagaagct cgccggttcc tataacatgt tgggggttaaa ctactacacc tcacggttct 60  
 ccaaaaaacat cgatatctca ccaaactact cacctgtgct caaactgac gacgcctacg 120  
 ccagtcaaga agttaacggg cctgacggga agcccattgg tcctcctatg ggaaatccat 180  
 ggatctacat gtaccctgag ggcttgaagg atctccttat gatcatgaag aacaaatagc 240  
 gaaaccacc tatctacatc acggagaacg gaatcgggga tgttgatacc aaggagacac 300  
 ctctacccat ggaggatgcc ttaaagtact acaaaaggct agattacatn caagcgccac 360  
 atcgctactc ttaaggaatc aatagacttg ggatcaaaat gtgcaanggg tacttttgctt 420  
 gggctctgnt ggaca 435

<210> 176  
 <211> 453  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(453)  
 <223> unsure at all n locations

<400> 176

gacgtaatgg gtcgtgtgcc atacggaana tcgtttctgg ataaacaggc cgaagaaagg 60  
 ncctgggaca tcaacctagg atggttctta gagccagtgg ttcgtggtga ctacccttct 120  
 tccatgagat cattggctag ggaacgacta ccttcttca aggacgagca gaaggagaag 180  
 ctgcgcgggt cctataacat gttgggggta aactactaca cctcacggtt ctccaaaaac 240  
 atcgatatct caccaaacta ctcacctgtg ctcaactctg acgacgccta cgccagtcaa 300  
 gaagttaacg ggctgacgg gaagcccatt ggtcctccta tgggaaatcc atggatctca 360  
 tgtaccctga gggcttgaag ggatctcctt atgaatcatg aagnaccaat tccggaaacc 420  
 cacctatcta cattaccgga gaacgggatt cgg 453

<210> 177  
 <211> 409  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(409)  
 <223> unsure at all n locations

<400> 177



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acgctgcagc ccatacctggc cttaggagcc acctagtagg acccaacaat gagagtttcn 120
cacggcacca cctgccgtct tcttctccac agagcagcaa gcgaaggtgt aaccttagct 180
ttactacacg atctgcaaga gtaggcagcc aaaatggagt ccaaagtgtg agcccctcgg 240
aaatcccaca aaggggactgg ttccccctctg acttcacctt cggtgccgcc acttcagcgt 300
accaaattga aggtgcttgg aatgaagatg gaaaggggga aa 342
```

```
<210>      180
<211>      464
<212>      DNA
<213>      Zea mays

<220>
<221>      unsure
<222>      (1)...(464)
<223>      unsure at all n locations
```

```
<400>      180

gttctagcta gctagcaaag ggggggaaaa tggctccgct tctcgtgct gccatgaacc 60
acgctgcagc ccatacctggc cttaggagcc acctagtagg acccaacaat gagagtttct 120
cacggcacca cctgccgtct tcttctccac agagcagcaa gcgaaggtgt aaccttagct 180
ttactacacg atctgcaaga gtaggcagcc aaaatggagt ccaaagtgtg agcccctcgg 240
aaatcccaca aaggggactg ggtccccctct gacttcacct tcngtgccga cacttcagng 300
gtnccaaatt gaaggtgctt ggaatgaaga tggaaagggg gaaagcaact gggatcactt 360
ntggcacaat cattcggaaa ggatactggg acgggagcna attcanaaca ttggagcgaa 420
tttcgtacca ntatgtacaa aaacgggacg ttnagatttg ctna 464
```

```
<210>      181
<211>      463
<212>      DNA
<213>      Zea mays

<220>
<221>      unsure
<222>      (1)...(463)
<223>      unsure at all n locations
```

```
<400>      181

ggccaagtaa cnggggtcga nccangcctc taaatagact cnnattacta aggtgtgctt 60
tgataacttc ggcgacaang tgaagaattg gttgacctt aatgagcccc agacatttac 120
ttccttttcc tacggaactg ggggtctttgc cccaggctcg tgctcacctg gactaagact 180
```

gtgcctaccc aactgggaat tcactcgtcg agccttacac tgctggccat aacattctcc 240  
tagcccacgc tgaggctggt gatctttaca acaagcatta caagcgcgac gacacccgca 300  
tagggcttgc gtttgacgta atgggtcgtg tgccatacgg aacatcgttt ctgggataaa 360  
canggccgaa gaaaagtcct gggaaatcaa cctanggatg ggtcctaaag ccaattgntc 420  
ntggtgaacn acccncncn aananattat tggctaggga aca 463

<210> 182  
<211> 337  
<212> DNA  
<213> Zea mays

<400> 182

gggaaatcca tggatctaca tgtaccctga gggcttgaag gatctcctta tgatcatgaa 60  
gaacaaatac ggaaaccac ctatctacat cacggagaac ggaatcgggg atgttgatac 120  
caaggagaca cctctaccca tggaggatgc cttaaagac tacaaaaggc tagattacat 180  
ccagcgccac atcgctactc ttaaggaatc aatagacttg ggatcaaag tgcaaggcta 240  
cttcgcttgg tctctgctgg acaactttga atgggttcgcc ggcttcaccg aacgttatgg 300  
cattgtctac gtcgaccgca acaattactg cacgcgt 337

<210> 183  
<211> 343  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(343)  
<223> unsure at all n locations

<400> 183

acggaacatc gtttctggat aaacaggccg aagaaaggtc ctgggacatc aacctaggat 60  
gnttcttaga gccagtgggt cgtgggtgact accccttctc catgagatca ttggctaggg 120  
aacgactacc cttcttcaag gacgagcaga aggagaagct cgccgggttc tataacatgt 180  
tggggttaaa ctactacacc tcacgggttct ccaaaaacat cgatatctca ccaaactact 240  
cacctgtgct caacactgac gacgcctacg ccagtcaaga agttaacggg cctgacggga 300  
agcccatggt cctcctatgg gaaatccatg gatctacatg tac 343

[illegible][illegible]

**P**

[illegible][illegible][illegible][illegible][illegible][illegible]

<211> 329  
 <212> DNA  
 <213> Zea mays  
 <400> 186  
 attggtcctc ctatgggaaa tccatggatc tacatgtacc ctgagggctt gaaggatctc 60  
 cttatgataa tgaagaacaa atacggaaac ccacctatct acatcaccga gaacggaatc 120  
 ggggatgttg ataccaaaga gacacctcta cccatggagg ctgccttaaa tgactacaaa 180  
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<210> 187  
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 <212> DNA  
 <213> Zea mays  
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 <223> unsure at all n locations  
 <400> 187  
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 gagagtctct cacggcacca cctgccgtct tcttctccac agagcagcaa gcgaagggtg 180  
 aaccttagct ttactacacg atctgcaaga gtaggcagcc aaaatggagt ccaaattgtg 240  
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 acttcagcgt accaaattga aggtgcttgg aa 332

<210> 188  
 <211> 487  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(487)  
 <223> unsure at all n locations  
 <400> 188  
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tggaaccca cctatctaca tcacggataa ccgaatccng gatgntgatc caatgaagac 420  
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attngtt 487

<210> 189  
<211> 343  
<212> DNA  
<213> Zea mays

<400> 189  
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gagagtttct cacggcacca cctgccgtct tcttctccac agagcagcaa gcgaagggtgt 180  
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ttcagcgtac caaattgaag gtgcttggaa tgaagatgga aag 343

<210> 190  
<211> 331  
<212> DNA  
<213> Zea mays

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caacaatgag agtttctcac ggcaccacct gccgtcttct tctccacaga gcagcaagcg 180  
aagggtgaac cttagcttta ctacacgatc tgcaagagta ggcagccaaa atggagtcca 240  
aatgttgagc ccctcggaat tcccacaaag ggactgggtc ccctctgact tcaccttcgg 300  
tgccgccact tcagcgtacc aaattgaagg t 331

<210> 191  
 <211> 324  
 <212> DNA  
 <213> Zea mays

<400> 191

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 aaccttagct ttactacacg atctgcaaga gtaggcagcc aaaatggagt ccaaattgttg 240  
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 acttcagcgt accaaattga aggt 324

<210> 192  
 <211> 322  
 <212> DNA  
 <213> Zea mays

<400> 192

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 agatggaaag ggggaaagca ac 322

<210> 193  
 <211> 324  
 <212> DNA  
 <213> Zea mays

<400> 193

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caacactgac gacgcctacg ccat 324

<210> 194  
<211> 331  
<212> DNA  
<213> Zea mays

<400> 194

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cctttaatga gccccagaca tttacttcct tttcctacgg aactgggggtc tttgccccag 240  
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aactgctgg ccataacatt ctctagccc a 331

<210> 195  
<211> 320  
<212> DNA  
<213> Zea mays

<400> 195

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ttctccatga gatcattggc tagggaacga ctacccttct tcaaggacga gcagaaggag 240  
aagctcgccg gttcctataa catggtgggg ttaaaactact acacctcacg gttctccaaa 300  
aacatcgata tctcaccaaa 320

<210> 196  
<211> 322  
<212> DNA  
<213> Zea mays

<220>  
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<223> unsure at all n locations

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 ggaagcccat tggtcctcct atgggaaatc catggatcta catgtaccct gagggcttga 240  
 aggatctcct tatgatcatg aagaacaaat acggaaaccc acctatctnc atcacggaga 300  
 acggaatcgg ggatgttgat ac 322

<210> 197  
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 <213> Zea mays  
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 <223> unsure at all n locations

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 <211> 318  
 <212> DNA  
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 acttcagcgt accaaatt 318

<210> 199  
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 <212> DNA  
 <213> Zea mays

<400> 199

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 ggaaccaaag aaggaggtat taaccggat ggcataagt actacagaaa cctcatcaac 180  
 ttgttgctag aaaacggcat agagccatat gtaacaattt tccactggga tgtacctcaa 240  
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 <211> 341  
 <212> DNA  
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<220>  
 <221> unsure  
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 <223> unsure at all n locations

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<210> 201  
 <211> 323  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(323)  
 <223> unsure at all n locations

<400> 201

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aatggagtcc aaatgttgag cccctcggaa atcccacaaa gggactgggtt cccctctgac 180  
ttcaccttcg gtgccgccac ttcagcgtac caaattgaag gtgcttggaa tgaagatgga 240  
aagggggaaa gcaactggga tcacttctgc cacaatcatc cggaaangat actggacngg 300  
agcaattcag acattggagc gaa 323

<210> 202  
<211> 318  
<212> DNA  
<213> Zea mays

<400> 202

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gaaaggggga aagcaactgg gatcacttct gccacaatca tccggaaagg atactggacg 180  
ggagcaattc agacattgga gcgaattcgt accatatgta caaaacggac gtcagattgc 240  
tcaaggaaat gggcatggac gcatataggt tctctatctc ttggcccaga atactgccga 300  
aggaacaaaa gaaggagg 318

<210> 203  
<211> 312  
<212> DNA  
<213> Zea mays

<400> 203

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tacttccttt tcctacggaa ctgggggtctt tgccccaggt cggtgctcac ctggactaga 240  
ctgtgcctac ccaactggga attcactcgt cgagccttac actgctggcc ataacattct 300  
cctagcccac gc 312

<210> 204  
<211> 315  
<212> DNA  
<213> Zea mays

# Abstract

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<223>      unsure at all n locations
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<210> 209  
 <211> 307  
 <212> DNA  
 <213> Zea mays

<400> 209

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 <212> DNA  
 <213> Zea mays

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 <212> DNA  
 <213> Zea mays

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<210> 212  
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 <212> DNA  
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<400> 212

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 ggctattcgc tggctctctgc 320

<210> 213  
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 <212> DNA  
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 <222> (1)...(331)  
 <223> unsure at all n locations

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 cgatctgcaa gggtaggcaa tgaaaatgga gtccaattgt tgagccccctc ggaaatccct 240  
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<212> DNA  
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 <212> DNA  
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 <212> DNA  
 <213> Zea mays

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<212> DNA  
<213> Zea mays

<400> 220

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<210> 221  
<211> 312  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(312)  
<223> unsure at all n locations

<400> 221

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<210> 222  
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 <212> DNA  
 <213> Zea mays  
 <400> 222

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<210> 223  
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 <212> DNA  
 <213> Zea mays  
 <400> 223

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 <213> Zea mays  
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 <221> unsure  
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 <223> unsure at all n locations  
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ctacccatgg aggatgcctt aaatgactac aaaaggctag attaccatcca gcgccacatc 120  
gctactctta aggaatcaat agacttggga tcaaattgtgc aaggctactt cgcttggtct 180  
ctgctggaca actttgaatg gttcgccggc ttcaccgaac gttatggcat tgtctacgtc 240  
gaccgcaaca ataactgcac gcgctacatg aaggagtctg ccagtgggtg aaacagttca 300  
ngccgcgaag aagcccagc 319

<210> 225  
<211> 297  
<212> DNA  
<213> Zea mays

<400> 225

tttacttctt tttcctacgg aactgggggtc tttgccccag gtcggtgctc acctggacta 60  
gactgtgcct acccaactgg gaattcactc gtcgagcctt acactgctgg ccataacatt 120  
ctcctagccc acgctgagggc tgttgatctt tacaacaagc attacaagcg cgacgacacc 180  
cgcatagggc ttgctgttga cgtaatgggt cgtgtgccat acggaacatc gtttctggat 240  
aaacaggccg aagaaagggtc ctgggacatc aacctaggat ggttcttaga gccagtg 297

<210> 226  
<211> 337  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(337)  
<223> unsure at all n locations

<400> 226

ctctgctggg acaactttga atggttcgcc ggcttcaccg aacgttatgg gcattgtcta 60  
cgtcgaccgc aacaataact gcaacgcgct aacatgaagg agtctgcaa gtggttgaaa 120  
cagttcaacg ccgcgaagaa gccagcaag aagattctta cgccagctta gaaatcgggg 180  
gcctcatgat gtgngtcag ccataaaaa actggtgtgt ggtttcgaac cgaaaatttt 240  
ctgttttttt tccgccacga gaggttctgg aggcatactc tccagcaccg tggctaataa 300  
cgcattgttc cattcagtct ggccttgatc tgcattgc 337

<210> 227





<223> unsure at all n locations

<400> 229

gagacgacac ccgcataggg cttgcgtttg acgtaatggg tcgtgtgcca tacngaacat 60  
 cgttttctgga taaacaggcc gaagaaaggt catgggacat caacctagga tggttcttag 120  
 agccagtggg tcgtgggtgac tacccttctt ccatgagatc attggctagg gaacgactac 180  
 ccttcttcaa ggacgagcag aaggagaagc tcgccggttc ctataacatg ttgggggttaa 240  
 actactacac ctacaggttc tccaaaaaca tcgacatctc accaaactat cactgtgctc 300  
 aacatgacga ccgcctacgc catcaagaag tangggctga cgg 343

<210> 230

<211> 300

<212> DNA

<213> Zea mays

<400> 230

agcagctcaa agctctagtt ctagctagct agcaaagggg gggaaaatgg ctccgcttct 60  
 cgctgctgcc atgaaccacg ctgcagccca tcctggcctt aggagccacc tagtaggacc 120  
 caacaatgag agtttctcac ggacacacct gccgttcttct tctccacaga gcagcaagcg 180  
 aaggtgtaac cttagcttta ctacacgatc tgcaagagta ggcagccaaa atggagtcca 240  
 aatgttgagc ccctcggaag tcccacaaag ggactgggttc ccctctgact tcaccttcgg 300

<210> 231

<211> 295

<212> DNA

<213> Zea mays

<400> 231

ctcaaagctc tagttctagc tagctagcaa agggggggaa aatggctccg cttctcgctg 60  
 ctgccatgaa ccacgctgca gccatcctg gccttaggag ccacctagta ggaccaaca 120  
 atgagagttt ctacggcac cacctgccgt cttcttctcc acagagcagc aagcgaaggt 180  
 gtaaccttag ctttactaca cgatctgcaa gagtaggcag ccaaaatgga gtccaaatgt 240  
 tgagccctc ggaaatccca caaagggact ggttccctc tgacttcacc ttcgg 295

<210> 232

<211> 461

<212> DNA

<213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(461)  
 <223> unsure at all n locations

<400> 232

agccacaatt ttccgnaaag gataatggga cggggagcat tgcaagacat tgggccgatt 60  
 ncgtaccata tngtacaaaa cggatngtca gattgctnga aggaaatggg catggacgca 120  
 tataggttct ctatctcttg gcctagaata ctggcctaaa ggggaacggt ccaaaggagg 180  
 tattaaccag gatggcatcg attactacaa aaaggctcat caacttggtg ctagagaatg 240  
 gcatagagcc atatgtaaca attttccact gggatgtccc tcaagcacta gaagagaagt 300  
 acggcgggatt cttagataag actcataaga ggattgtaaa tgattacaaa aacttcgcta 360  
 aggtgtgctt cgacaacttt ggtgacaang tgaagaantg gttgancntt aatgaagccc 420  
 caaacattta cctcaatttc ccaanngaaa ccgggggtcct t 461

<210> 233  
 <211> 290  
 <212> DNA  
 <213> Zea mays

<400> 233

ctcgtcgagc cttacactgc tggccataac attctcctag cccacgctga ggctgttgat 60  
 ctttacaaca agcattacaa gcgcgacgac acccgcatag ggcttgcggt tgacgtaatg 120  
 ggtcgtgtgc catacggaaac atcgtttctg gataaacagg ccgaagaaag gtcctgggac 180  
 atcaacctag gatggttctt agagccagtg gttcgtgggtg actaccctt ctccatgaga 240  
 tcattggcta ggggaacgact acccttcttc aaggacgagc agaaggagaa 290

<210> 234  
 <211> 290  
 <212> DNA  
 <213> Zea mays

<400> 234

gaaggatctc cttatgatca tgaagaacaa atacggaaac ccacctatct acatcacgga 60  
 gaacggaatc ggggatggtg ataccaagga gacacctcta cccatggagg atgccttaaa 120  
 tgactacaaa aggctagatt acatccagcg ccacatcgct actcttaagg aatcaataga 180  
 cttgggatca aatgtgcaag gctacttcgc ttgggtctctg ctggacaact ttgaatgggt 240

cgccggcttc accgaacgtt atggcattgt ctacgtcgac cgcaacaata 290

<210> 235  
<211> 291  
<212> DNA  
<213> Zea mays

<400> 235

cgctgaggct gttgatcttt acaacaagca ttacaagcgc gacgacaccc gcatagggct 60  
tgcgtttgac gtaatgggtc gtgtgccata cggaacatcg tttctggata aacaggccga 120  
agaaagggtca tgggacatca acctaggatg gttcttagag ccagtgggtc gtggtgacta 180  
ccccctctcc atgagatcat tggctaggga acgactaccc ttcttcaagg acgagcagaa 240  
ggagaagctc gccggttcct ataacatgtt ggggttaaac tactacacct c 291

<210> 236  
<211> 288  
<212> DNA  
<213> Zea mays

<400> 236

gtcataagag cattgtagaa gattacacat actttgctaa ggtgtgcttt gataacttcg 60  
gcgacaaggt gaagaattgg ttgaccttta atgagcccca gacatttact tccttttcct 120  
acggaactgg ggtctttgcc ccaggtcggg gctcacctgg actagactgt gcctacccaa 180  
ctgggaattc actcgtcgag ccttactctg ctggccataa cattctccta gccacgctg 240  
aggctgttga tctttacaac aagcattaca agcgcgacga caccgcga 288

<210> 237  
<211> 288  
<212> DNA  
<213> Zea mays

<400> 237

gggacatcaa cctaggatgg ttcttagagc cagtgggtcg tggtgactac cccttctcca 60  
tgagatcatt ggctagggaa cgactaccct tcttcaagga cgagcagaag gagaagctcg 120  
ccggttctta taacatgttg ggggttaaact actacacctc acggttctcc aaaaacatcg 180  
atatctcacc aaactactca cctgtgctca aactgacga cgcctacgcc agtcaagaag 240  
ttaacggggc tgacgggaag cccattgggtc ctctatggg aaatccat 288

<210> 238  
 <211> 290  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(290)  
 <223> unsure at all n locations

<400> 238

caagcgcgac gacacccgca tagggcttgc gtttgacgta atgggtcgtg tgccatacgg 60  
 aacatcgttt ctggataaac aggccgaaga aaggctcctgg gacatcaacc taggatgggt 120  
 cttagagcca gnggttcgtg gtgactaccc cttctccatg agatcattgg ctagggaacg 180  
 actacccttc ttcaaggacg agcagaagga gaagctcgcc gggtcctata acatggtggg 240  
 gttaaaactac tacacctcac gggtctccaa aaacatcgat atctcaccaa 290

<210> 239  
 <211> 292  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(292)  
 <223> unsure at all n locations

<400> 239

tgcatggcta ctctgcttgg tctctgctgg ataactttga atggtagcgc ggctacaccg 60  
 aacgttatgg cattgtctac gtcgaccgca aaaataacta cacgcgtac atgaaggagt 120  
 cagccaagtg gttaaaagag ttcaatactg cgaagaagcc tagcaagaag attattacgc 180  
 cagcttaaaa acatgggacc tcgtgatgtg ggtacggtgc caccatgaa ataaaaacct 240  
 agtgtgtggt ttgaaaccta aatttttcnt tttcnttttt gcaccatgag ag 292

<210> 240  
 <211> 291  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(291)  
 <223> unsure at all n locations

<400> 240  
 ggaaaaatggc tccgcttctc gctgctgcc tgaaccacgc tgcagcccat cctggcctta 60  
 ggagccacct agnaggaccc aacaatgaga gtttctcacg gcaccacctg ccgtcttctt 120  
 ctccacagag cagcaagcga aggtgtaacc ttagctttac tacacgatct gcaagagtag 180  
 gcagccaaaa tggagtccaa atgttgagcc cctcggaaat cccacaaagg gactgggtcc 240  
 cctctgactt caccttcggt gccgccactt cagcgtacca aattgaaggt g 291

<210> 241  
 <211> 319  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(319)  
 <223> unsure at all n locations

<400> 241  
 ggatcaaatg tgcaaggcta cttcgcttgg tctctgcngg acaactttga atngttcgcc 60  
 ggcttcaccg aacgttatgg cattgtctac gtcgaccgca acaataactg cacgcgctac 120  
 atgaaggagt ctgccaaagt gttgaaacag ttcaacgccg cgaagaagcc cagcaagaag 180  
 attcttacgc cagcttagaa atcggggggc tcatgatgtg ggtgcagcnc ataaaaaact 240  
 ggtgtgtggt ttcgaaccgn natttctgtt tttccgccac gagagttctg gaggcatact 300  
 ctccagcacc gtgctaata 319

<210> 242  
 <211> 286  
 <212> DNA  
 <213> Zea mays

<400> 242  
 cgcttacgcc agtcaagaag ttaacgggcc tgacgggaag ccatttggtc ctctatggg 60  
 aaatccatgg atctacatgt accctgaggg cttgaaggat ctcttatga tcatgaagaa 120  
 caaatacgga aaccaccta tctacatcac ggagaacgga atcggggatg ttgataccaa 180  
 ggagacacct ctacccatgg aggatgcctt aaatgactac aaaaggctag attacatcca 240  
 gcgccacatc gctactctta aggaatcaat agacttgga tcaaat 286

<210> 243

<211> 298  
<212> DNA  
<213> Zea mays

<400> 243

gtacggcggc ttctagaaa acggcataga gccatatgta acaattttcc actgggatgt 60  
acctcaagca ctagaagaga agtacggcgg cttcctagat aagagtcata agagcattgt 120  
agaagattac acatactttg ctaaggtgtg ctttgataac ttcggcgaca aggtgaagaa 180  
ttggttgacc tttaatgagc cccagacatt tacttccttt tcctacggaa ctgggggtctt 240  
tgccccaggt cgggtgctcac ctggactaga ctgtgcctac ccaactggga attcactc 298

<210> 244  
<211> 326  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(326)  
<223> unsure at all n locations

<400> 244

aattgaaggt gcttggaatg aanatggaaa ngnggaaagc aactgggatc acttctgcca 60  
caatcatccg gaaangatac tggacgggag caattcagac attggagcga ntctgtacca 120  
tatgtacaaa acggacgtca gattgctcaa ggaaatgggc atggacgcat ataggttctc 180  
tatctcttgg gccagaata ctgccgaagg aaccaaagaa ggaggtatta acccggtatg 240  
catcaagtac tacagaaacc tcntcaactt gttgctggaa aacggcntan agccatntgt 300  
aacanttttc cactgggatg tacctc 326

<210> 245  
<211> 284  
<212> DNA  
<213> Zea mays

<400> 245

cccagacatt tacttcattt tcctatggaa ccgggggtctt tgccccagga cgatgctcac 60  
cgggactaga ctgtgccatc ccaactggga attcactcgt cgaaccttac attgctggcc 120  
acaacattct tctagccac gctgaggctg ttgatcttta caacaagtat tacaagggcg 180  
agaacggccg cataggtctt gcatttgatg taatgggtcg tgtgccatac ggaacatcat 240

ttctagatga acaggccaaa gaaaggtcca tggacattaa ccta 284

<210> 246  
<211> 295  
<212> DNA  
<213> Zea mays

<400> 246

gaaaggggga aagcaactgg gatcacttct gccacaatca tccggaaagg atactggacg 60  
ggagcaattc agacattgga gcgaattcgt accatatgta caaaacggac gtcagattgc 120  
tcaaggaaat gggcatggac gcatataggt tctctatctc ttggcccaga atactgccga 180  
agggaaacca agaaggaggt attaaccgg atggcatcaa gtactacaga aacctcatca 240  
acttggtgct ggaaaacggc atagagccat atgtaacaat tttccatggg atgta 295

<210> 247  
<211> 294  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(294)  
<223> unsure at all n locations

<400> 247

caacttggtg ctagaaaacg gcatagagcc atatgtaaca attttccact gggatgtacc 60  
tcaagcacta gaagagaagt acggcggcgt cctagataan agtcataaga gcattgtaga 120  
agattacaca tactttgcta aggtgtgcnt tgataacttc ggcgacaagg tgaagaattg 180  
gttgaccttt aatgagcccc agacatttac ttccttttcc tacggaactg gggctcttgc 240  
cccaggctcg tgctcactgg actagactgt gcctacccaa ctgggaattc actc 294

<210> 248  
<211> 284  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(284)  
<223> unsure at all n locations

<400> 248

gaattgggtg acctttaatg agccccagac atttacttcc ttttctacg gaactggggt 60

ctttgccccca ggtcggtgct cacctggact agactgtgcc tacccaactg ggaattcact 120  
 cgtcgagcct tacactgctg gccataacat tctcctagcc cacgctgagg ctggtgatct 180  
 ttacaacaag cattacaagc gcgacgacac ncgcataggg cttgcgtttg acgtaatggg 240  
 tcgtgtgccca tacggaacat cgtttctgga taaacangcc gaag 284

<210> 249  
 <211> 284  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(284)  
 <223> unsure at all n locations

<400> 249

ctttacaaca agcattacaa gcgcgacgac acccgcatag ggcttncggt tgacgtaatg 60  
 ggtcgtgtgc cataggaac atcgtttctg gataaacagg ccgaagaaag gtccctgggac 120  
 atcaacctag gatggttctt agagccagtg gttcgtggtg actaccctt ctccatgaga 180  
 tcattggcta gggaacgact acccttcttc aaggacgagc agaaggagaa gctcgccggt 240  
 tcctataaca tggtgggggt aaactactac acctcacggt tctc 284

<210> 250  
 <211> 304  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(304)  
 <223> unsure at all n locations

<400> 250

agaagattac acatactttg ctaagggtgtg ctttgataac ttcggcgaca aggtgaagaa 60  
 ttggttgacc tttaatgagc ccagacatt tacttccttt tcctacggaa ctgggggtctt 120  
 tgccccaggt cgggtgctcac ctggactaga ctgtgcctac ccaactggga attcactcgt 180  
 cgagccttac actgctggcc ataacattct ctagccan gctgaggctg ttgatcttta 240  
 caaccnngca ttacangcgc gacgacaccc gcatagggct tgcgntttga cgtaatgggt 300  
 ngtg 304



<210> 251  
 <211> 287  
 <212> DNA  
 <213> Zea mays

<400> 251

caaagctcta gttctagcta gctagcaaag ggggggaaaa tggctccgct tctcgctgct 60  
 gccatgaacc acgctgcagc ccatcctggc cttaggagcc acctagtagg acccaacaat 120  
 gagagtttct cacggcacca cctgccgtct tcttctccac agagcagcaa gcgaagggtgt 180  
 aaccttagct ttactacacg atctgcaaga gtaggcagcc aaaatggagt ccaaattgttg 240  
 agccccctcg aaatcccaca aagggatggg tccccctetga cttcact 287

<210> 252  
 <211> 291  
 <212> DNA  
 <213> Zea mays

<400> 252

aatggctcca cttctcgccg cagccatgaa ccacgctacc catccagtcc ttagaagcca 60  
 tctaggaccc aacaatgaga gtttctcacg acaccaccta tcttcttcac caciaagcag 120  
 taagcgaagg tttaacctta gctttacgcc acgatctgca agggtaggca atgaaaatgg 180  
 agtccaattg ttgagccctt cggaaatccc tcgaagggac tggttccctt ctgacttcat 240  
 ctttggtgcc gccacttcag cgtaccaaat tgaagtgca tggaacgaag a 291

<210> 253  
 <211> 285  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(285)  
 <223> unsure at all n locations

<400> 253

gngctacatg aaggagtctg ccaagtgggt ganacagttc aacgccgcga agaagcccag 60  
 caagaagatt cttacgccag cttagaaatc gggggcctca tgatgtgggt gcagcccata 120  
 aaaaactggg gtgtgggttc gaaccgaaaa ttttctgttt ttttccgcca cgagangttc 180  
 tggaggcata ctctccagca cctgggctaa taacgcattg ttccaattca gtctggcctt 240

gtcatgcatg caatanttaa agtgatgggt ttccctgttt caaaa 285

<210> 254  
<211> 278  
<212> DNA  
<213> Zea mays

<400> 254

gccatatgta acaattttcc actgggatgt acctcaagca ctagaagaga agtacggcgg 60  
cttcctagat aagagtcata agagcattgt agaagattac acctacttcg ctaagggtgtg 120  
ctttgataac ttccggcgaca aggtgaagaa ttgggtgacc tttaatgagc cccagacatt 180  
tacttccttt tctacggaa ctggggtctt tgccccaggg cggtgctcac ctggactaga 240  
ctgtgcctac ccaactggga attcactcgt cgagcctt 278

<210> 255  
<211> 282  
<212> DNA  
<213> Zea mays  
  
<220>  
<221> unsure  
<222> (1)...(282)  
<223> unsure at all n locations

<400> 255

cggcgacaag gtgaagaatt gggtgacctt taatgagccc cagacattta cttccttttc 60  
ctacggaact ggggtctttg ccccggtcg gtgctnacct ggactagact gtggctaccc 120  
aactgggaat tcaactcgtcg agccttacac tgctggccat aacattctcc tagccacgc 180  
tgaggctgtt gatctttaca acaagcatta caagcgcgac gacacccgca tagggcttgc 240  
gtttgacgta atgggtcgtg tgccatacng aacatcgttt ct 282

<210> 256  
<211> 288  
<212> DNA  
<213> Zea mays

<400> 256

caaaactcta gctagctagc aggggggggaa atggctccac ttctcgccgc agccatgaac 60  
cacgctgccc atccagtcct tagaagccat ctaggacca acaatgagag tttctcacga 120  
caccacctat cttcttcacc gcaaagcagt aagcgaaggt ttaaccttag ctttacgcca 180



catggaggct gccttaaagt actacaaaag gctagattac atccagcgcc acatctcaac 180  
tctcaaggag tcaatagact tgggagcaaa tgtgcatggc tacttcgctt ggtctctgct 240  
ggataacttt gaatggtacg ccggctacac cgaa 274

<210> 260  
<211> 293  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(293)  
<223> unsure at all n locations

<400> 260

cgggacgtgg ncnanaagct ctagttctag ctagctagca aaggggggga aaatggctcc 60  
gcttctcgct gcagcnatga accacgctgc agccatcctt ggccttagga gccacctagt 120  
aggacccaac aatgagagtt tctcacggca ccacctgccg tcttcttctc cacagagcag 180  
caagcgaagg tgtaacctta gctttactac acgatctgca agagtaggca gccaaaatgg 240  
agtccaaatg ttgagccctt cggaaatccc acaaaggac tggttcccct ctg 293

<210> 261  
<211> 279  
<212> DNA  
<213> Zea mays

<400> 261

cttcgctaag gtgtgctttg ataacttcgg cgacaagggtg aagaattggt tgaccttta 60  
tgagccccag acatttactt ccttttccta cggaactggg gtctttgccc cagggcggtg 120  
ctcacctgga ctagactgtg cctaccaac tgggaattca ctgctcgagc cttacactgc 180  
tgcccataac attctcctag cccacgctga ggctgttgat ctttacaaca agcattacaa 240  
gcgcgacgac acccgcatag ggcttgctgt tgacgtaat 279

<210> 262  
<211> 274  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(274)  
<223> unsure at all n locations

<400> 262  
 acggaactgg ggtctttgcc ccaggtcggt gctcacctgg actagactgt gcctacccaa 60  
 ctgggaattc actcgtegag ccttacantg ctggccataa cattctccta gcccacgctg 120  
 aggctgttga tctttacaac aagcattaca agcgcgacga caccgcata gggcttgctg 180  
 ttgangtaat gggtcgtgtg ccatacggaa catcgtttct ggataaacag gccgaagaaa 240  
 ggtcctggga catcaaccta ggatggttct taga 274

<210> 263  
 <211> 276  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(276)  
 <223> unsure at all n locations

<400> 263  
 ggcattggacg catatagggt ctctatctct tggcctagaa tactgcctan nggaacggtc 60  
 gaaggaggta ttaaccagga tggcatcgat tactacaaaa ggctcatcaa cttgttgcta 120  
 gagaatggca tagagccata tgtaacaatt ttccactggg atgtccctca agcactagaa 180  
 gagaagtacg ggggattctt agataagact cataagagga ttgtaaatga ttacaaaaac 240  
 ttcgctaagg tgtgcttcga caactttggt gacaag 276

<210> 264  
 <211> 276  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(276)  
 <223> unsure at all n locations

<400> 264  
 atgagcccca gacatttact tccttttctt acggaactgg ggtctttgcc ccaggtcggt 60  
 gctcacctgg actagactgt gcctacccaa ctnngaattc actcgtegag ccttacactg 120  
 ctggccataa cattctccta gcccacgctg aggctgttga tctttacaac aagcattaca 180  
 agcgcgacga caccgcata nggcttgctg ttgacgtaat gggtcgtgtg ccatacggaa 240

catcgtttct ggataaacag gccgaagaaa ggtcct 276

<210> 265  
<211> 274  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(274)  
<223> unsure at all n locations

<400> 265

ggttctccaa aaacatcgat atctcaccaa actactcacc tgtgctcaac antgacgacg 60  
cctacgccag tcaagaagtt aacgggcctg acgggaagcc cattggctct cctatgggaa 120  
atccatggat ctacatgtac cctgagggct tgaaggatct ccttatgatc atgaagaaca 180  
aatacggaaa cccacctatc tacatcacgg agaacggaat cggggatggt gataccaagg 240  
agacacctct acccatggag gatgccttaa atga 274

<210> 266  
<211> 280  
<212> DNA  
<213> Zea mays

<400> 266

gaactggggt ctttgcccca ggtcgggtgct cacctggact agactgtgcc taccgaactg 60  
ggaattcact tcgtcgagcc ttacactgct ggccataaca ttctcctagc ccacgctgag 120  
gctgttgatc tttacaacaa gcattacaag cgcgacgaca cccgcatagg gcttgcgttt 180  
gacgtaatgg gtcgtgtgcc atacggaaca tcgtttctgg ataaacaggc cgaagaaagg 240  
tcctgggaca tcaacctagg atggttctta gagccagtgg 280

<210> 267  
<211> 279  
<212> DNA  
<213> Zea mays

<400> 267

cattgtagaa gattacacat actttgctaa ggtgtgcttt gataacttcg gcgacaaggt 60  
gaagaattgg ttgaccttta atgagcccca gacatttact tccttttctc acggaactgg 120  
ggtctttgcc ccaggtcggt gctcacctgg actagactgt gcctacccaa ctgggaattc 180



gcagctcaaa gctctagttc tagctagcta gcaaangggg ggaaaatggc tccgcttctc 60  
gctgctgcc tgaaccacgc tgcagcccat cctggcctta ggagccacct agtaggaccc 120  
aacaatgaga gtttctcacg gcaccacctg ccgctcttctt ctccacagag cagcaagcga 180  
aggtgtaacc ttagctttac tacacgatct gcaagagtag gcagccaaaa tggagtccaa 240  
atgttgagcc cctcggaat cccacaaagg gactgggt 278

<210> 271  
<211> 312  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(312)  
<223> unsure at all n locations

<400> 271

attcgtagca tatgtacaaa acggacgtca gattgctcaa ggaaatgggc atggacgcat 60  
aggttctcta tctcttggcc cagaatactg ccgaaggaac caaagaagga ggtattaacc 120  
cgnatggcat caagtactac agaaacctca tcaacttggt gctagaaaac ggcatagagc 180  
catatgtaac aattttccac tgggatgtac ctcaagcact agaagagaag tacggcggct 240  
tcctagataa gagtcataag agcattgtag aagattacac atactttgct aaggtgtgct 300  
ttgataactt cg 312

<210> 272  
<211> 276  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(276)  
<223> unsure at all n locations

<400> 272

gagccccaga catttacttc cttttcctac ggaactgggg tctttgcccc aggtcggtgc 60  
tcacctggac tagactgtgc ctacccaact gggaattcac tcgtcgagcc ttacactgct 120  
ggccataaca ttctcctagc ccacgctgag gctgttgatc tttacaacaa gcattacaag 180  
cgcgacgaca cccgcatagg gcttgcggtt gacgtaatgg gtcgtgtgcc atacggaaca 240



tcgttctgga taaacaggcc gaagaaangt cctggg 276

<210> 273  
<211> 267  
<212> DNA  
<213> Zea mays

<400> 273

ggccataaca ttctcctagc ccacgctgag gctgttgatc tttacaacaa gcattacaag 60  
cgcgacgaca cccgcatagg gcttgcggtt gacgtaatgg gtcgtgtgcc atacggaaca 120  
tcgtttcttg ataaacaggc cgaagaaagg tcctgggaca tcaacctagg atggttctta 180  
gagccagtgg ttcgtggtga ctaccccttc tccatgagat cattggctag ggaacgacta 240  
cccttcttca aggacgagca gaaggag 267

<210> 274  
<211> 276  
<212> DNA  
<213> Zea mays

<400> 274

gccatctagg acccaacaat gagagtttct cagcacacca cctatcttct tcaccacaaa 60  
gcagtaagcg aaggtttaac cttagcttta cgccacgac tgcaagggtta ggcaatgaaa 120  
atggagtcca attggtgagc ccctcgaaa tcctcgaag ggactgggtc ccctctgact 180  
tcctcttttg tgccgccact tcagcgtagc aaattgaagg tgcattggaac gaagatggaa 240  
aggggggaaag caattgggat cacttctgcc acaatt 276

<210> 275  
<211> 267  
<212> DNA  
<213> Zea mays

<400> 275

caaaaacatc gacatctcac caaactactc acctgtgctc aacactgacg acgcctacgc 60  
cagtcaagaa gttaacgggc ctgacgggaa gccattgggt cctcctatgg gaaatccatg 120  
gatctacatg taccctgagg gcttgaagga tctccttatg ataatgaaga acaaatacgg 180  
aaaccacact atctacatca ccgagaacgg aatcggggat gttgatacca aagagacacc 240  
tctacccatg gaggtgcct taaatga 267

<210> 276  
<211> 271  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(271)  
<223> unsure at all n locations

<400> 276

tgctacatga aggagtctgc caagtgggtg anacagttca acgccgcgaa gaagcccagc 60  
aagaagattc ttacgccagc ttagaaatcg ggggcctcat gatgtgggtg cagcccataa 120  
aaaactgggtg tgtggtttcg aaccgaaaat tttctgtttt tttccgccac gagangttct 180  
ggaggcatatc tctccagcac cgtggctaata aacgcattgt tccaattcag tctggccttg 240  
tcatgcatgc aataaataaa gtgatggggtt t 271

<210> 277  
<211> 285  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(285)  
<223> unsure at all n locations

<400> 277

cggnacntgg ngnaaggngag tctgccaaagt ggttgaaaca gttcaacgcc gcgaagaagc 60  
ccagcaagaa gattcttacg ccagcttaga aatcgggggc ctcattgatgt ggggtgcagcc 120  
cataaaaaaac tgggtgtgtgg tttcgaaccg aaaattttct gtttttttcc gccacgagag 180  
gttctggagg catactctcc agcaccgtgg ctaataacgc attgttccaa ttcagtctgg 240  
ccttgtcatg catgcaataa ataaagtgat gggtttcctt gtttc 285

<210> 278  
<211> 268  
<212> DNA  
<213> Zea mays

<400> 278

cggaaccca cctatctaca tcacggagaa cggaatcggg gatgttgata ccaaggagac 60  
acctctaccc atggaggatg ccttaaataa ctacaaaagg ctagattaca tccagcgcca 120

catcgctact cttaaggaat caatagactt gggatcaaat gtgcaaggct acttcgcttg 180  
gtctctgctg gacaactttg aatgggtcgc cggcttcacc gaacgttatg gcattgtcta 240  
cgtcgaccgc aacaataact gcacgcgc 268

<210> 279  
<211> 318  
<212> DNA  
<213> Zea mays  
<400> 279

gcagctcaaa gctctagttc tagctagcta gcaaaggggg ggaaaatggc tccgcttctc 60  
gctgctgcca tgaaccacgc tgcagcccat cctggcctta ggagccacct agtaggaccc 120  
aacaatgaga gtttctcacg gcaccacctg ccgtcttctt ctccacagag cagcaagcga 180  
aggtgtaact tagctttact acacgatctg caagagtagg cagccaaaat ggagtccaaa 240  
tgttgagccc ctcggaatc ccacaaaggg actggttccc tctgacttca cttcggtgcc 300  
ggcaacttca gcgtacca 318

<210> 280  
<211> 264  
<212> DNA  
<213> Zea mays  
<400> 280

ctctgctgga taactttgaa tggtagccg gctacaccga acgttatggc attgtctacg 60  
tcgaccgcaa aaataactac acgcgctaca tgaaggagtc agccaagtgg ttaaaagagt 120  
tcaatactgc gaagaagcct agcaagaaga ttattacgcc agcttaaaaa catgggacct 180  
cgtgatgtgg gtacgggtgcc acccatgaaa taaaaaccta gtgtgtgggt tgaaacctaa 240  
atctttcttt ttcttttttg cacc 264

<210> 281  
<211> 264  
<212> DNA  
<213> Zea mays  
<400> 281

caaagctcta gttctagcta gctagcaaag ggggggaaaa tggctccgct tctcgctgct 60  
gccatgaacc acgctgcagc ccacccctggc cttaggagcc acctagtagg acccaacaat 120  
gagagtttct cagggacca cctgccgtct tcttctccac agagcagcaa gcgaagggtg 180

aaccttagct ttactacacg atctgcaaga gtaggcagcc aaaatggagt ccaaattgtg 240  
agccccctcgg aaatcccaca aagg 264

<210> 282  
<211> 265  
<212> DNA  
<213> Zea mays

<400> 282

gggatgttga taccaaggag acacctctac ccatggagga tgccttaaata gactacaaaa 60  
ggctagatta catccagcgc cacatcgcta ctcttaagga atcaatagac ttgggatcaa 120  
atgtgcaagg ctacttcgct tggctctctgc tggacaactt tgaatggttc gccggcttca 180  
ccgaacgtta tggcattgtc tacgtcgacc gcaacaataa ctgcacgcgc tacatgaagg 240  
agtctgccaa gtggttgaaa cagtt 265

<210> 283  
<211> 284  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(284)  
<223> unsure at all n locations

<400> 283

tttgcctcan gtcggtgctc acctggacta gactgtgnct acccaactgg gaattcactc 60  
gtccgagcct tacactgctg gccataacat tctcctagcc cacgctgagg ctgttgatct 120  
ttacaacaag cattacaagc gcgacgacac ccgcataggg cttgcgtttg acgtaatggg 180  
tcgtgtgcca tacggaacat cgtttctgga taaacaggcc gaagaaangt ctgggacatc 240  
aacctaggat ggttcttaga gccagtggtt cgtggtgact ancc 284

<210> 284  
<211> 270  
<212> DNA  
<213> Zea mays

<400> 284

ataaactact acacctcaat attctccaaa catatcgaca tctcaccaaa atactcgct 60  
gttctcaaca ctgacgacgc ctacgctagt caagaaacgt atgggcctga cgggaaaccc 120

attggtcctc ctatgggaaa tccgtggatc tacttatacc cagaaggcct aaaggatatc 180  
 cttatgatca tgaagaacaa atatggaaac ccacctatct acatcactga gaacggatcg 240  
 gggatgttga tacaaaggag aaacctctac 270

<210> 285  
 <211> 269  
 <212> DNA  
 <213> Zea mays

<400> 285

agcagctcaa agctctagtt ctagctagct agcaaagggg gggaaaatgg ctccgcttct 60  
 cgctgctgcc atgaaccacg ctgcagccca tcctggcctt aggagccacc tagtaggacc 120  
 caacaatgag agtttctcac ggcaccacct gccgtcttct tctccacaga gcagcaagcg 180  
 aaggtgtaac cttagcttta ctacacgatc tgcaagagta ggcagccaaa atggagtcca 240  
 aatgttgagc ccctcgaaa tcccacaaa 269

<210> 286  
 <211> 264  
 <212> DNA  
 <213> Zea mays

<400> 286

tgagccccag acatttactt ctttttcta cggaactggg gtctttgccc caggtcggta 60  
 ctcacctgga ctagactgtg cctaccaac tgggaattca ctgctgagc cttacactgc 120  
 tggccataac attctcctag cccacgctga ggctgttgat ctttacaaca agcattacaa 180  
 gcgcgacgac acccgcatag ggcttgctt tgacgtaatg ggtcgtgtgc catacggaac 240  
 atcgtttctg gataaacagg ccga 264

<210> 287  
 <211> 263  
 <212> DNA  
 <213> Zea mays

<400> 287

gttgggggta aactactaca cctcacggtt ctccaaaaac atcgatatct caccaaacta 60  
 ctcacctgtg ctcaacactg acgacgccta cgccagtcaa gaagttaacg ggctgacgg 120  
 gaagccatt ggtcctccta tgggaaatcc atggatctac atgtaccctg agggcttgaa 180

ggatctcctt atgatcatga agaacaaata cggaaaccca cctatctaca tcacggagaa 240  
cggaatcggg gatgttgata cca 263

<210> 288  
<211> 274  
<212> DNA  
<213> Zea mays

<400> 288

atttgtgcag gaatcgggga tgttgatacc aaggagacac ctctacccat ggaggatgcc 60  
ttaaatgact ataaaaggct agattacatc cagcgccaca tcgctactct taaggaatca 120  
atagacttgg gatcaaattgt gcaaggctac ttcgcttggt ctctgctgga caactttgaa 180  
tggttcgccg gcttcaccga acgttatggc attgtctacg tcgaccgcaa caataactgc 240  
acgcgctaca tgaaggagtc tgccaagtgg ttga 274

<210> 289  
<211> 299  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(299)  
<223> unsure at all n locations

<400> 289

aaagctctag ttctagctag cnagcaaagg gggggaaaat ggctccgctt ctcgcngetg 60  
ccatgaacca cgctgcagcc cancctggcc ttaggagcca cctagtagga cccaacaan 120  
gagagtttct cacggcacca cctgccgtct tcttctccac agagcagcaa gcgaaggtgn 180  
aaccnnagcn ttactacacg atcngcaaga gtaggcagcc aaaatggagt tcaaattgtg 240  
agcccctcgg aaattccaca aagggactgg ttcccctctg acttnacctt cggtggnngg 299

<210> 290  
<211> 262  
<212> DNA  
<213> Zea mays

<400> 290

ctctagctag ctagcagggg gggaaatggc tccacttctc gccgcagcca tgaaccacgc 60  
tgcccatcca gtccttagaa gccatctagg acccaacaat gagagtttct cacgacacca 120

cctatcttct tcaccgcaaa gcagtaagcg aaggtttaac cttagcttta cgccacgatc 180  
 tgcaagagta ggcaatcaaa atggagtcca attgttgagc ccttcgaaa tccctcgaag 240  
 ggactgggtc cctccgact tc 262

<210> 291  
 <211> 261  
 <212> DNA  
 <213> Zea mays

<400> 291

ggaaaatggc tccgcttctc gctgctgcca tgaaccacgc tgcagcccat cctggcctta 60  
 ggagccacct agtaggaccc aacaatgaga gtttctcacg gcaccacctg ccgtcttctt 120  
 ctccacagag cagcaagcga aggtgtaacc ttagctttac tacacgatct gcaagagtag 180  
 gcagccaaaa tggagtccaa atgttgagcc cctcggaat cccacaaagg gactggttcc 240  
 cctctgactt caccttcggt g 261

<210> 292  
 <211> 424  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(424)  
 <223> unsure at all n locations

<400> 292

acagctctag ttctanctan ctancaangg gngggaaaat ggctccgctt ctgctgctg 60  
 ccatgaacca cnctgcancc catcctggcc ttaggagcca cctagtacga cccaacattg 120  
 agagtttctc acggcaccac ctgccgtctt cttctccaca gagcagcatc gcnaaggtgt 180  
 aaccttagcn ttactacacg atctgcaaga gtaggcagcc aaantggant cnaantgttg 240  
 agccccncng aaatcncaca aagggaacngg tnccctctg acttcacctt cggtgcnegc 300  
 cncntcagcg tancanggnt caatgtgctt ggaanganga tggaancggg gaaancgnct 360  
 gggatnantt cngcganagt catccgaaa ngatatggac tggancactt cagacattgg 420  
 atca 424

<210> 293  
 <211> 306  
 <212> DNA





<210> 296  
 <211> 258  
 <212> DNA  
 <213> Zea mays

<400> 296

gccaaagtgg tgaacagtt caacgccg aagaagcca gcaagaagat tcttacgcca 60  
 gcttagaaat cgggggcctc atgatgtggg tgcagcccat aaaaaactgg tgtgtgggtt 120  
 cgaaccgaaa attttctgtt tttttccgcc acgagagggt ctggaggcat actctccagc 180  
 accgtggcta ataacgcatt gttccaattc agtctggcct tgtcatgcat gcaataaata 240  
 aagtgatggg tttccctg 258

<210> 297  
 <211> 266  
 <212> DNA  
 <213> Zea mays

<400> 297

agcaattcag acattggagc gaattcgtac catatgtaca aaacggacgt cagattgctc 60  
 aaggaaatgg gcatggacgc atatagggtc tctatctctt ggcccagaat actgccgaag 120  
 gaaccaaaga aggaggtatt aaccgggatg gcatcaagta ctacagaaac ctcacaaact 180  
 tgttgctaga aaacggcata gagccatatg taacaatttc cactgggatg tacctcaagc 240  
 actagaagag aagtacggcg gcttcc 266

<210> 298  
 <211> 270  
 <212> DNA  
 <213> Zea mays

<400> 298

tacaagcgcg acgacacccg catagggtt gcgtttgacg taatgggtcg tgtgccatac 60  
 ggaacatccg tttctggata aacaggccga agaaagggtca tgggacatca acctaggatg 120  
 gttcttagag ccagtgggtc gtgggtgacta ccccttctcc atgagatcat tggctaggga 180  
 acgactaccc ttcttcaagg acgagcagaa ggagaagctc gccggttcct ataacatggt 240  
 ggggttaaac tactacacct cacggttctc 270

<210> 299  
 <211> 287

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<212>      DNA
<213>      Zea mays

<220>
<221>      unsure
<222>      (1)...(287)
<223>      unsure at all n locations

<400>      299

attacaccta cttegctaag gtgtgctttg ataacttcgg cgacaagggtg aagaattggt    60
tgacctttta tgagccccag acatttactt ctttttccta cggaactggg gtctttgccc    120
cagggcggtg ctcacctgga ctagactgtg cctacccaac tgggaattca ctcgtcgagc    180
cttacactgc tggccataac attctcctag cccacgctga ggctgttgat ctttacaaca    240
agcatacaag gcgacgacac ccgcatangg ctgcgttgac gtatggg                    287

<210>      300
<211>      252
<212>      DNA
<213>      Zea mays

<400>      300

cttatgatca tgaagaacaa atacggaaac ccacctatct acatcacgga gaacggaatc    60
ggggatggtg ataccaagga gacacctcta cccatggagg atgccttaaa tgactacaaa    120
aggctagatt acatccagcg ccacatcgct actcttaagg aatcaataga cttgggatca    180
aatgtgcaag gctacttcgc ttggtctctg ctggacaact ttgaatgggt cgccggcttc    240
accgaacggt at                                                            252

<210>      301
<211>      256
<212>      DNA
<213>      Zea mays

<400>      301

cttctocatg agatcattgg ctagggaacg actacccttc ttcaaggacg agcagaagga    60
gaagctcgcc ggttcctata acatgtttggg gttaaactac tacacctcac ggttctccaa    120
aaacatcgac atctcaccaa actactcacc tgtgctcaac actgacgacg cctacgccag    180
tcaagaagtt aacgggcctg acaggaagcc cattggtcct cctatgggaa atccatggat    240
ctacatgtac cctgag                                                        256

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<210> 302  
 <211> 255  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(255)  
 <223> unsure at all n locations

<400> 302

tcaacttggt gctagaaaac ggcatagagc catatgtaac aatttnccac tgggatgtac 60  
 ctcaagcact agaagagaag tacggcggct tcctagataa gagtcataag agcattgtag 120  
 aagattacac atactttgct aagggtgtgct ttgataactt cggcgacaag gtgaagaatt 180  
 ggttgacctt taatgagccc cagacattta cttccttttc ctacggaact ggggtctttg 240  
 cccaggtcg gtgct 255

<210> 303  
 <211> 264  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(264)  
 <223> unsure at all n locations

<400> 303

cggacgctgg tgnactacaa aaggctagat tacatccagc gccacatcgc tactcttaag 60  
 gaancaatag acttgggatac aaatgtgcaa ggctacttcg cttgggtctct gctggacaac 120  
 tttgaatggt tcgccggctt caccgaacgt tatggcattg tctacgtcga ccgcaacaat 180  
 aactgcacgc gctacatgaa ggagtctgcc aagtggttga aacagttcaa cgccgcgaag 240  
 aagcccagca agaagattct tacg 264

<210> 304  
 <211> 252  
 <212> DNA  
 <213> Zea mays

<400> 304

attacacata ctttgctaag gtgtgctttg ataacttcgg cgacaagggtg aagaattggt 60  
 tgaccttta tgagccccag acatttactt ctttttcta cggaactggg gtctttgccc 120





<222> (1)...(261)  
<223> unsure at all n locations

<400> 310

cggacgctgg ccggcgacaa ggtgaagaat tggttgacct ttaatgagcc ccagacattt 60  
acntcctttt cctacggaac tggggtcttt gccccaggtc ggtgctcacc tggactagac 120  
tgtgcctacc caactgggaa ttcactcgtc gagccttaca ctgctggcca taacattctc 180  
ctagcccacg ctgaggctgt tgatctttac aacaagcatt acaagcgcgga cgacacccgc 240  
atagggcttg cgtttgacgt a 261

<210> 311  
<211> 300  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(300)  
<223> unsure at all n locations

<400> 311

aacaagcatt acaagcgcgga cgacaccccg catagggctt gcgtttgacc gtaatggggtc 60  
gtgtgccata cggaacatcg tttctggata aacaggccga agaaagggtcc tgggacatca 120  
acctaggatg gttcttagag ccagtgggtc gtgggtgacta cccctctcca tgagatcatt 180  
ggctagggaa cgactaccct cttcaaggac gagcanaagg agaagctcgc cggttcctat 240  
aacagttggg gttaactata cacctcaggt tctccaaaaa catcgatatc tcaccaacta 300

<210> 312  
<211> 332  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(332)  
<223> unsure at all n locations

<400> 312

cttgcatcttg acgtaatggg tcgtgtccca tacganaagt cggcgtttac ggatcaacag 60  
gccgaacaaa ggtcctggga cattaacctt ggatggttct tggagccggt tggtcgtggt 120  
gactaatccn ttctccatga gatcattggc aagggaacga ctacccttct tcaactgacaa 180

agagcaagag aagctagtgg gttcctatga catgttgggg ttaaactatt atacctcaag 240  
gttctctaaa aacatcgata tctcaccaaa ctactcgcca gtgctcaaca ctgacgacgc 300  
atatgccagt caagaaacga atgggcctga cg 332

<210> 313  
<211> 258  
<212> DNA  
<213> Zea mays

<400> 313

gttgcgctgt gtgttatatt ttatgaaata aaaatctaga tggttgtgtt tatgatagat 60  
gttactatac ggtcgcaact gccgtcaatt caatttttat ttgtgcagga atcggggatg 120  
ttgataccaa ggagacacct ctacccatgg aggatgcctt aaatgactac aaaaggctag 180  
attacatcca gcgccacatc gctactctta aggaatcaat agacttggga tcaaattgtgc 240  
aaggctactt cgcttggt 258

<210> 314  
<211> 244  
<212> DNA  
<213> Zea mays

<400> 314

caacttggtg ctagaaaacg gcatagagcc atatgtaaca attttccact gggatgtacc 60  
tcaagcacta gaagagaagt acggcggtt cctagataag agtcataaga gcattgtaga 120  
agattacaca tactttgcta aggtgtgctt tgataacttc ggcgacaagg tgaagaattg 180  
gttgaccttt aatgagcccc agacatttac ttccttttcc tacggaactg gggctcttgc 240  
ccca 244

<210> 315  
<211> 259  
<212> DNA  
<213> Zea mays

<400> 315

tcgagcttta cactgctggc cataacattc tcctagccca cgctgagget gttgatcttt 60  
acaacaagca ttaacaagcg gcgacgacac ccgcataggg cttgcgtttg acgtaatggg 120  
tcgtgtgcca tacggaacat cgtttctgga taaacaggcc gaagaaaggc catgggacat 180  
caacctagga tggttcttag agccagtggc tcgtggtgac tacccttctt ccatgagatc 240





g 241

<210> 319  
 <211> 242  
 <212> DNA  
 <213> Zea mays

<400> 319

agcagctcaa agctctagtt ctagctagct agcaaagggg gggaaaatgg ctccgcttct 60  
 cgctgctgcc atgaaccacg ctgcagccca tcttggcctt aggagccacc tagtaggacc 120  
 caacaatgag agttttctcac ggcaccacct gccgtcttct tctccacaga gcagcaagcg 180  
 aaggtgtaac cttagcttta ctacacgata tgcaagagta ggcagccaaa atggagtcca 240  
 aa 242

<210> 320  
 <211> 236  
 <212> DNA  
 <213> Zea mays

<400> 320

caaagctcta gttctagcta gctagcaaag ggggggaaaa tggctccgct tctcgctgct 60  
 gccatgaacc acgctgcagc ccatacctggc cttaggagcc acctagtagg acccaacaat 120  
 gagagtttct cacggcacca cctgccgtct tcttctccac agagcagcaa gcgaagggtg 180  
 aaccttagct ttactacacg atctgcaaga gtaggcagcc aaaatggagt ccaaat 236

<210> 321  
 <211> 241  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(241)  
 <223> unsure at all n locations

<400> 321

cttnaatgac tacaaaaaggc tagattacat ccagcgccac atcgctactc ttaaggaatc 60  
 aatagacttg ggatcaaattg tgcaaggcta cttcgcttgg actctgctgg acaactttga 120  
 atggattgcc ggcttcaccg aacgttatgg cattgtctac gtcgaccgca acaataactg 180  
 cacgcgctac atgaaggagt ctgccaaagt gttgaaagag ttcaacaccg cgaaaaagcc 240

c 241

<210> 322  
 <211> 341  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(341)  
 <223> unsure at all n locations

<400> 322

gccgcnggga accaccagaa ggaggtatta acccgatgg catcaagtac tacagaaacc 60  
 tcatcaactt gttgctagaa aacggcatag agccatatgt aacaattttc cactgggatg 120  
 tacctcaagc actagaagag aagtacggcg gcttcctaga taagagtcac aagagcattg 180  
 tagaaattac acatactttg ctaaggtgtg ctttgataac ttcggcgaca aggtgaagat 240  
 tggttgacct ttaatgagcc ccagacttta cttccttttc ctacggaatg gggctcttgc 300  
 cccagtcggt gctcactgga tagatgtgcc taccactgg g 341

<210> 323  
 <211> 269  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(269)  
 <223> unsure at all n locations

<400> 323

caaagctcta gttctagcta gctagcaaag ggggggaaaa tggctcngnt tctncgctgc 60  
 tgccatgaac cacgctgcag cccatcctgg ccttaggagc nacctagtag gncccaacaa 120  
 tgagagtttc tcacggcacc acctgcngtc ttcttctcca cagagcagca agcnaagggtg 180  
 taaccttcgc ttactacac natctgcaag agtaggcagc caaaatggag tcnaaatntt 240  
 ganccctcg gaaatccac aaagggant 269

<210> 324  
 <211> 316  
 <212> DNA  
 <213> Zea mays



cgctgctgcc atgaaccacg ctgcagccca tcttggcctt aggagccacc tagtaggacc 120  
 caacaatgag agttttctcac ggcaccacct gccgtcttct tctccacaga gcagcaagcg 180  
 aaggtgtaac ttagctttac tacacgatct gcaagagtag gcagccaaaa tggagtccaa 240  
 atgttga 247

<210> 327  
 <211> 252  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(252)  
 <223> unsure at all n locations

<400> 327

agacattgga gcgaattcgt accatatgta caaaacggat gtcagattgc tgaaggaaat 60  
 gggcatggac gcatataggt tctctatctc ttggcctaga atactgccta nnggaacggg 120  
 cgaaaggggt attaaccagg atggcatcna ttactacana aggctcatcn acttgntgct 180  
 agaggatggc ntagangcat atgnaacnat tttccactgg gatgtccctc aagcactaga 240  
 agagaagtac gg 252

<210> 328  
 <211> 231  
 <212> DNA  
 <213> Zea mays

<400> 328

ctgggaattc actcgtcgag ccttacctg ctggccataa cattctccta gccacgctg 60  
 aggctgttga tctttacaac aagcattaca agcgcgacga caccgcata gggcttgctg 120  
 ttgacgtaat gggtcgtgtg ccatacggaa catcgtttct ggataaacag gccgaagaaa 180  
 ggtcatggga catcaaccta ggatggttct tagagccagt ggttcgtggt g 231

<210> 329  
 <211> 237  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(237)  
 <223> unsure at all n locations

<400> 329

caaagctcta gttctagcta gctagcnaaa ggggggaaaa tggctccgct tctcgctgct 60  
gccatgaacc acgctgcagc ccatacctggc cttaggagcc acctagtagg acccaacaat 120  
gagagtttct cagggcacca cctgccgtct tcttctccac agagcagcaa gcgaagggtg 180  
aaccttagct ttactacacg atctgcanga gtaggcagcc aaaatggagt ccaantg 237

<210> 330

<211> 264

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(264)

<223> unsure at all n locations

<400> 330

acnccttntc natgagatna ttggctaggg aacgactacc cttcttcaag gacgagcaga 60  
aggagaagct tcgccggttc ctataaatg ttgggggttaa actactacac ctcacgggttc 120  
tccaaaaaca tcgatatctc acnaaactan tcacctgtgc tcaacactga ccaccgccnn 180  
cgccagtcaa gaagttaacg ggccctgangg gaagcccant ggtcctccta tgggaaatcc 240  
atggatctac atgtaccctg aggg 264

<210> 331

<211> 228

<212> DNA

<213> Zea mays

<400> 331

cacatacttt gctaagggtg gctttgataa cttcggcgac aaggtgaaga attggttgac 60  
ctttaatgag cccagacat ttacttctt ttctacgga actgggggtct ttgcccagg 120  
tcggtgctca cctggactag actgtgccta cccaactggg aattcactcg tcgagcctta 180  
cactgctggc cataacattc tcctagccca cgctgaggct gttgatct 228

<210> 332

<211> 233

<212> DNA

<213> Zea mays

<220>



<210> 335  
 <211> 241  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(241)  
 <223> unsure at all n locations

<400> 335

ttcggtngcc gccacttcag cgtaccaa at tgaaggtgct tggaatgang atngaaaggg 60  
 ggaaagcaac tgggatcact tctgccacaa tcatccggaa aggatactgg acgggagcaa 120  
 ttcagacatt ggagcgaatt cgtaccatat gtacaaaacg gacgtcagat tgctcaagga 180  
 aatgggcatg gacgcatata gggttctctan ctcttggccc agaatactgc cgaaggaacc 240  
 a 241

<210> 336  
 <211> 240  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(240)  
 <223> unsure at all n locations

<400> 336

ggacaacttt gaatgggtcg ccggcttcac cgaacgttat ggcnttgtct acgtcgaccg 60  
 caacaataac tgcacgcgct acatgaagga gtctgccaaag tgggtgaaac agttcaacgc 120  
 cgcaagaag cccagcaaga ngattctttn gccagcttng aaatcggggg cctcatgatg 180  
 tgggtgcagc ccataaaaaa ctggtgtgtg gtttcgaann gaaaatttgc tgtttttncg 240

<210> 337  
 <211> 226  
 <212> DNA  
 <213> Zea mays

<400> 337

cgctactctt aaggaatcaa tagacttggg atcaa atgtg caaggctact tcgcttggtc 60  
 tctgctggac aactttgaat gggtcgcggg cttcaccgaa cgttatggca ttgtctacgt 120





tctgacttca ccttcggtgc cgccac 266

<210> 341  
<211> 223  
<212> DNA  
<213> Zea mays

<400> 341

ccagacattt acttcctttt cctacggaac tggggctctt gcccaggtc ggtgctcacc 60  
tggactagac tgtgcctacc caactgggaa ttcactcgtc gagccttaca ctgctggcca 120  
taacattctc ctagcccacg ctgaggctgt tgatctttac aacaagcatt acaagcgcga 180  
cgacacccgc atagggttg cgtttgacgt aatgggtcgt gtg 223

<210> 342  
<211> 262  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(262)  
<223> unsure at all n locations

<400> 342

gcccagcaag aagattctta cgccagctta gaaatcngcg gcctcatgat gtgggtgcag 60  
cccataaaaa actggtgtgt ggtttcgaac cgaaaatttt ctgttttttt cgcgccagag 120  
aggttctgga ggcatantct ccagcacctg ggctaataac gcattgttcc aattcngtct 180  
ggccttgtca tgcattgcaat aaataaagt atgggtttcc ctgtttcaaa nannannna 240  
aagnnganga ggaggnccgn gg 262

<210> 343  
<211> 224  
<212> DNA  
<213> Zea mays

<400> 343

acttcggcga caaggtgaag aattggttga cttttaatga gcccagaca tttacttcct 60  
tttctacgg aactggggtc tttgcccag gtcggtgctc acctggacta gactgtgcct 120  
accaactgg gaattcactc gtcgagcctt aactgctgg ccataacatt ctctagccc 180  
acgctgaggc tgttgatctt tacaacaagc attacaagcg cgac 224

<210> 344  
 <211> 324  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(324)  
 <223> unsure at all n locations

<400> 344

gtcctcctgt atgtatatct ttgatttttt ttattgtaat atgcatattg gtaactagtg 60  
 aataatattt actacactaa tttgcagatg ggaaatccat ggatctacat gtaccctgag 120  
 ggcttgaagg atctccttat gatcatgaag aacaaatagc gaaacccacc tatctacatc 180  
 acggagaacg gaatcgggga tgttgatacc aaggagacac ctctacccat ggaggatgcc 240  
 ttaaatgact acaaaagggt agattacatc cagcgccaca tcgctactct taaggnatcc 300  
 atagacttgg gtcaaattgtg caag 324

<210> 345  
 <211> 308  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(308)  
 <223> unsure at all n locations

<400> 345

ggtcgtgtcc catacgaaaa gtcggcggtt acggatcaac aggccgaaca aaggctcctgg 60  
 gacattaacc taggatgggt cttgganccg gttgttcgtg gtgactatcc cttctccatg 120  
 agatcattgg caagggaacg actacccttc ttcactgaca aagagcaaga gaagctagtg 180  
 ggttcctatg acatgttggg gttaaactat tatacctcaa gggtctctaa aaacatcgat 240  
 atctcaccaa actactcgcc agtgctcaac actgacgacg catatgccag tcaagaaacg 300  
 aatgggct 308

<210> 346  
 <211> 290  
 <212> DNA  
 <213> Zea mays

<400> 346

atcccttctc catgagatca ttggcaaggg aacgactacc cttcttcact gacaaagagc 60  
aagagaagct agtgggttcc tatgacatgt tggggttaaa ctattataacc tcaaggttct 120  
ctaaaaacat cgatatctca ccaaactact cgccagtgtc caaactgac gacgcatatg 180  
ccagtcaaga aacgaatggg cctgacggga atcccattgg tccttggatg gggaattcgt 240  
ggatctacct atatcctgaa ggcctaaagg atctgcttat gatcatgaag 290

<210> 347  
<211> 341  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(341)  
<223> unsure at all n locations

<400> 347  
cgaaggtgta accttagctt tactacacga tctgcaagag taggcagcca aaatggagtc 60  
caaagtgtga gcccctcgga atcccacaaa gggactgggt cccctctgac ttcaccttcg 120  
gtgccgccat tcagcgtacc aaattgaagg tgcttgaat gaagatggaa aggggggaaag 180  
caactgggat cattctgcca caatcatccg gaaaggatat ggacnggnnn nantcagaca 240  
ttggagcgaa ttcgtagcat atgtacanaa cggacgttag attgctcagg aaatgggcat 300  
ggacgcatat angttctctn tntctggggc cagatnctgc c 341

<210> 348  
<211> 286  
<212> DNA  
<213> Zea mays

<400> 348  
gacgcatagg gcttgcattt gacgtaatgg gtcgtgtccc atacgaaaag tcggcgttta 60  
cggatcaaca ggccgaacaa aggtcctggg acattaacct aggatgggtt ttggagccgg 120  
ttgttcgtgg tgactatccc ttctccatga gatcattggc aagggaacga ctacccttct 180  
tcaactgaca agagcaagag aagctagtgg gttcctatga catgttgggg ttaaactatt 240  
atacctcaag gttctctaaa aacatcgata tctcaccaaa ctactc 286

<210> 349  
<211> 220

<212> DNA  
<213> Zea mays

<400> 349

gctagattac atccagcgcc acatcgctac tcttaaggaa tcaatagact tgggatcaaa 60  
tgtgcaaggc tacttcgctt ggtctctgct ggacaacttt gaatggtttg ccggcttcac 120  
cgaacgttat ggcattgtct acgtcgaccg caacaataac tgcacgcgct acatgaagga 180  
gtctgccaaag tgggtgaaag agttcaacac cgcgaaaaag 220

<210> 350  
<211> 480  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(480)  
<223> unsure at all n locations

<400> 350

anaaaacggn atanagccat atgtaacaat ctttcactgg gatgtncctc aagcacngag 60  
aagngaagta cngcggcttc ctagntaaga gtcatangag cattgtanaa gattacacat 120  
actntgctaa ggtgtgcttt gataacttnn gcgacaaggt gaagaaattg gttgaccttt 180  
aatgagcccc anacatttac ttctttttcc tacngaactg gggtcctttg cnccaagttn 240  
ggtgctnacc tggactagac tgtgncttnc caantgggaa ttcnctnatt gangctttac 300  
aaatggttgg ccattaaca tttttctaaa ccactcttaa gctngttgat ctttaccanc 360  
aancnnttnn ntncnanca caccngnatt nggctttgct ttnactnaa angggtcttg 420  
ntcentacng taacaatcnn ttnnttgana aanangtcen nataaaaangg cnntnggaca 480

<210> 351  
<211> 260  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(260)  
<223> unsure at all n locations

<400> 351

cggatgtcag attgctgaag gaaatgggca tggacgcata taggttctct atctcttggc 60







<210> 360  
 <211> 286  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(286)  
 <223> unsure at all n locations

<400> 360

gaaagggtcat gggacatcaa cctaggatgg ttcttagagc cagtgggttcg tggtgactac 60  
 cccttctcca tgagatgcat tggctaggga acgactaccc ttcttcaagg acgagcagaa 120  
 ggagaagctc gccggttcct ataacatggt ggggttaaac tactacacct gcacggttct 180  
 ccaaaaacat cgacatctgc accaaactan tgcacctgtg ctcaacatga cgacgcctac 240  
 gccatcaaga agttaacggg ctgacgggaa gccattggt ctctat 286

<210> 361  
 <211> 337  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(337)  
 <223> unsure at all n locations

<400> 361

gggaacgact acgcttnttc aaggacgagc aganggagaa gctcgcnngt tcctataana 60  
 tgttgggggt aaactactac acctnacggt tntccanaaa catcgactcn cnaccaaact 120  
 actcacacnt gctcaacact gacgacgcta cgcnagtnaa gaagttaacg ggcttgacgg 180  
 gagccttgg tcctcctatg ggntctccat ggatctacat gtaccctgag ggcttggtng 240  
 gatctcttat gatcatgaag aacaaatagc gaaaccacn tatctanatn aggagangga 300  
 atcggggatg ttgataccan gagacactct acccatg 337

<210> 362  
 <211> 312  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(312)  
 <223> unsure at all n locations



<400> 362

cnaaagctct agttctagct agctagcaaa gggggggaaa atggctcngc ttctcgctgc 60  
 tgccatgaac cangctgcag cccatcctgg ccttaggagc nacctagtag gacccaacaa 120  
 atggagngtt tctcaggca ccacctgccg tcttcttctc canagagcag caagcgaagg 180  
 tgtaacctta gctttactac acggtctgca aggnntaggc agccaaaatg gnggtcccaa 240  
 atnttncagc cctctntnga atcctngnaa ggnnctggcc cccctncnnt ttaaaatncg 300  
 gngcagcnaa tt 312

<210> 363

<211> 217

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(217)

<223> unsure at all n locations

<400> 363

gaagattctt acgccagctt agaaatcggg ggcctcatga tgtgggtgca gcccataaaa 60  
 aactggtgtg tggtttcgaa cggaaaattt tctgtttttt tccgccacga gaggttctgg 120  
 aggcatatct tccagcaccg ttggnaataa cgcattgttc caattcagtc tggcttgtca 180  
 tgcattgcant aaataaagtg atgggtttcc ctgnnttc 217

<210> 364

<211> 199

<212> DNA

<213> Zea mays

<400> 364

gttgggaata aactactaca cctcaatatt ctccaaacat atcgacatct caccaaaata 60  
 ctgcctgtt ctcaacactg acgacgccta cgctagtcaa gaaacgtatg ggctgacgg 120  
 gaaaccatt ggtcctccta tgggaaatcc gtggatctac ttataccag aaggcctaaa 180  
 ggatatacctt atgatcatg 199

<210> 365

<211> 200

<212> DNA

<213> Zea mays

<400> 365

ggaacgacta cccttcttca aggacgagca gaaggagaag ctgcgccggtt cctataacat 60  
gttgggggtta aactactaca cctcacgggtt ctccaaaaac atcgatatct caccaaacta 120  
ctcacctgtg ctcaacactg acgacgccta cgccagtcaa gaagttaacg ggccctgacgg 180  
gaagcccatt ggtcctccta 200

<210> 366

<211> 265

<212> DNA

<213> Zea mays

<400> 366

ggtgactatc ccttctccat gagatcattg gcaagggaac gactaccctt cttcactgac 60  
aaagagcaag agaagctagt ggggttcctat gacatggttg ggttaaacta ttatacctca 120  
aggttctcta aaaacatcga tatctcacca aactactcgc cagtgtctcaa cactgacgac 180  
gcatatgcc a gtcaagaaac gaatgggcct gacgggaatc ccattggtcc ttggatgggg 240  
aattcgtgga tctacctata tcctg 265

<210> 367

<211> 211

<212> DNA

<213> Zea mays

<400> 367

caagcagctc aaagctctag ttctagctag ctagcaaagg gggggaaaat ggcaccgctt 60  
ctcgtgctg ccatgaacca cgctgcagcc catcctggcc ttaggagcca cctagtagga 120  
cccaacaatg agagtttctc acggcaccac ctgccgtctt cttctccaca gagcagcaag 180  
cgaaggtgta accttagctt tactacacga t 211

<210> 368

<211> 239

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(239)

<223> unsure at all n locations

<400> 368

cttatatgnc tacnaaaggg ttgatnacat cnagngccnc atcnctantg ttantnaatc 60  
 tatngacttg ggatcaantg gncgatgctn cttcgnnttg antctgctgg acaactttga 120  
 angnattgcc ggcttcaccg aacgttatgg cattgtctac gtcgaccgca acaataactg 180  
 cacgcgctac atgaaggagt ctgccaagtg gttgaaagag ttcaacaccg cgaaaaagc 239

<210> 369  
 <211> 195  
 <212> DNA  
 <213> Zea mays

<400> 369

cgacgacacc cgcataagggc ttgcgtttga cgtaatgggt cgtgtgccat acggaacatc 60  
 gtttctggat aaacaggccg aagaaaggtc ctgggacatc aacctaggat gggtcttaga 120  
 gccagtgggt cgtggtgact accccttctc catgagatca ttggctaggg aacgactacc 180  
 cttcttcaag gacga 195

<210> 370  
 <211> 193  
 <212> DNA  
 <213> Zea mays

<400> 370

caaagctcta gttctagcta gctagcaaag ggggggaaaa tggctccgct tctcgctgct 60  
 gccatgaacc acgctgcagc ccattctggc cttaggagcc acctagtagg acccaacaat 120  
 gagagtttct cacggcacca cctgccgtct tcttctccac agagcagcaa gcgaagggtg 180  
 aaccttagct tta 193

<210> 371  
 <211> 198  
 <212> DNA  
 <213> Zea mays

<400> 371

caaagctcta gttctagcta gctagcaaag ggggggaaaa tggctccgct tctcgctgct 60  
 tgccatgaac cacgctgcag cccattctgg ccttaggagc cacctagtag gaccaacaa 120  
 tgagagtttc tcacggcacc acctgccgtc ttcttctcca cagagcagca agcgaagggtg 180  
 taaccttagc ttactac 198

<210> 372  
 <211> 328  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(328)  
 <223> unsure at all n locations

<400> 372

attggaaact cgctcactga gccatacact gttggccata accttctccg agcccacgct 60  
 gagggctgttg atctttacaa caagtattac aaggggtgaga atggacgcat agggcttgca 120  
 tttgacgtaa tgggctcgtgt ccatacga aagtcggcgt ttacggatca acaggccgaa 180  
 caaaggtcct gggacattaa cctaggatgg ttcttggagc cggttgttcg tggtgactat 240  
 ccctctccat gagatcatgg caaggaacga ctacccttct tcatgacaaa gagcaagaga 300  
 agctatgggt tctatgacng ttgggtta 328

<210> 373  
 <211> 239  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(239)  
 <223> unsure at all n locations

<400> 373

gaaaggtcct gggacatcaa ccanggatgg ttcttangag ccagtgggtan cgtgggtgact 60  
 aacccttctc catgagatca ttggctaggg aacgactacc cttcttcaag gacgagcaga 120  
 aggagaagct cgccggttcc tataacatgt tgggggttaa ctactacacc tcacggttct 180  
 ccaaaaacat cgatatctca ccaaactact cacctgtgtc acatgangac gcctagcca 239

<210> 374  
 <211> 212  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(212)  
 <223> unsure at all n locations

<400> 374

agcagctcaa agctctagtt ctagctagct agcaaagggg gggaaaatgg ctccgcttct 60  
cgctgctgcc atgaaccacg ctgcagccca tcctggcctt aggagccacc tagtangacc 120  
caacaatgag agtttctcac ggcaccacct gcngtcttct tctncacaga gcggcaagcg 180  
aaggngtaac ctgagcttta ctanangttt gc 212

<210> 375

<211> 221

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(221)

<223> unsure at all n locations

<400> 375

caagantagg cagccaaaat ggagtccaaa tggtgagccc ctcggaatc ccacaaaggg 60  
actggttccc ctctgacttc accttcggtg ccgccacttc agcgtaccaa attgaaggtg 120  
cttggaatga agatggaaag ggggaaagca actgggatca cttctgcnac aatcatccgg 180  
aaaggatctg gnnnggagca ttccagacat gggncgattt c 221

<210> 376

<211> 212

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(212)

<223> unsure at all n locations

<400> 376

ctagctagct agcagggggg gaaatggctc cacttctcgc cgcagccatg aaccacgctg 60  
ctcatccagt ccttagaagc catctaggan ccaacaatga gagtttctca cgacaccacc 120  
tatnttcttc accgcaaagc agtaagcgaa ggtttaacct tagctttacg ccagatctgc 180  
aaagnaggca atcaaaatgg agtccattgt tg 212

<210> 377

<211> 180

<212> DNA

<213> Zea mays

<400> 377  
 caaagctcta gttctagcta gctagcaaag ggggggaaaaa tggctccgct tctcgctgct 60  
 gccatgaacc acgctgcagc ccatacctggc cttaggagcc acctagtagg acccaacaat 120  
 gagagtttct cacggcacca cctgccgtct tcttctccac agagcagcaa gcgaaggtgt 180

<210> 378  
 <211> 266  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(266)  
 <223> unsure at all n locations

<400> 378  
 aatcaataga cttgggatca aatgtgcaag gtacttcgct tgggctctgc tggacaactt 60  
 tgaatgggtc gccgcttcac cgaacgttat ggcattgcta cgcgaccgca acantaactg 120  
 cacgcgctca tgaaggagct gcaagtgggt gaaacagttc aacgccgcga agaaccacaca 180  
 agaagattct tacgccagct tagaaatcgg gggcctcatg atgtgggtgc agnccataaa 240  
 aactgnggtt ggttcgaacc gaaatt 266

<210> 379  
 <211> 274  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(274)  
 <223> unsure at all n locations

<400> 379  
 catcgtttct ggataaacag gccgaagaaa ggtcctggga catcaaccta ggatggttct 60  
 tagagccagt ggttcgtggt gactaccctt tctccangag ntnagtggct agggganggg 120  
 gganncnctg cncttggttg ttatgnnggg gnaagnnngn gggggncctn aaaaaattng 180  
 gggtnaactt gacaccctca cgntctcca aaaacatcga tatctcacca aactactcac 240  
 ctgtgctcaa cactgacgac gcctacgcca gtca 274

<210> 380

<211> 209  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(209)  
<223> unsure at all n locations

<400> 380

cgtccaattc nattttttatt tgtgcaggaa tcgggggatgt tganaccaag gagacacctc 60  
tacctatgga ggatgcctta nntgactaca anaggctaga ttacatccag cgccacatcg 120  
ctactcttaa ggaatcaata gacttgggat caaatgtggc aatgctactt cgcttggtct 180  
ctgctggaca actttgaatg gttcgccgg 209

<210> 381  
<211> 183  
<212> DNA  
<213> Zea mays

<400> 381

ggtgcttga atgaagatgg aaagggggaa agcaactggg atcacttctg ccacaatcat 60  
ccggaaagga tactggacgg gagcaattca gacattggag cgaattcgta ccatatgtac 120  
aaaacggacg tcagattgct caaggaaatg ggcattggacg catatagttc tctatctctt 180  
ggc 183

<210> 382  
<211> 238  
<212> DNA  
<213> Zea mays

<400> 382

gggtgagaat ggacgcatag ggcttgcatt tgacgtaatg ggtcgtgtcc catagcaaaa 60  
gtcggcgttt acggatcaac aggccgaaca aaggctctgg gacattaacc taggatggtt 120  
cttgagccg gttgttcgtg gtgactatcc cttctccatg agatcattgg caaggggaacg 180  
actacccttc ttactgaca aagagcaaga gaagctagtg ggttcctatg acatgttg 238

<210> 383  
<211> 167  
<212> DNA  
<213> Zea mays

tcggcgacaa ggtgaagaat tggttgacct ttaatgagcc cnagact 167

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<220>
<221>      unsure
<222>      (1)...(210)
<223>      unsure at all n locations
```

cggaancgg nngttggata gngnnccccc 210

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<220>
<221>      unsure
<222>      (1)...(360)
<223>      unsure at all n locations
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tccnaacnngg aactgtnggn cttgtgcnc caggtcggtg ctcanctggg actagactgt 300





aaatgtgcta acccaattgg aaactcgctc actgagccat acactgttgg ccataacctt 60  
 ctccgagccc acgctgaggc tgttgatctt tacaacaagt attacaaggg tgagaatgga 120  
 cgcatagggc ttgcatttga cgtaatgggt cgtgtcccat acgaaaagtc ggcgtttacg 180  
 gatcaacagg ccgaacaaag gtccctgggac attaaccta 219

<210> 390  
 <211> 160  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(160)  
 <223> unsure at all n locations

<400> 390

gattacacat actttgctaa ggtgtgcttt gataacttcg gcgacaaggt gaagaattgg 60  
 ttgaccttta atgagcccca gacattactt ccttttctta cggaactggg gtcttttccc 120  
 cangtcggng ctcantggac tagactgtgc ctacccannt 160

<210> 391  
 <211> 139  
 <212> DNA  
 <213> Zea mays

<400> 391

caacactgac gacgcctacg ccagtcaaga agttaacggg cctgacggga agcccattgg 60  
 tcctcctatg ggaaatccat ggatctacat gtaccctgag ggcttgaagg atctccttat 120  
 gatcatgaag aacaaatag 139

<210> 392  
 <211> 150  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(150)  
 <223> unsure at all n locations

<400> 392

gtcctagacc cagctgagg ctgttgatct ttacaacaag cattacaagc gcgacgacac 60  
 nncgcatagg gcttgcggtt gacgtaatgg gtcgtgtgcc atacggaaca tcgtttctgg 120

ataaacaggc cgaagaaagg tcctgggatt 150

<210> 393  
 <211> 175  
 <212> DNA  
 <213> Zea mays

<400> 393

tggacagtga gggcttgcatt ttgacgtaat gggtcgtgtc ccatacgaaa agtcggcggt 60

tacggatcaa caggccgaac aaaggctcctg ggacattaac ctaggatggg tcttgagacc 120

ggttgttcgt ggtgactatc ccttctccat gagatcattg gcaagggaac gacta 175

<210> 394  
 <211> 133  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(133)  
 <223> unsure at all n locations

<400> 394

cggatgtcag attgctgaag gaaatgggca tggacgcata taggttctct atctcttggc 60

cnanaatact gcctaaggna acggtcgaag gaggtattaa ccaggatggc atcgattact 120

acaaaaggct cat 133

<210> 395  
 <211> 129  
 <212> DNA  
 <213> Zea mays

<400> 395

cagaaacctc atcaacttgt tgctagaaaa cggcatagag ccatatgtaa caattttcca 60

ctgggatgta cctcaagcac tagaagagaa gtacggcggc ttcctagata agagtcataa 120

gagcattgt 129

<210> 396  
 <211> 127  
 <212> DNA  
 <213> Zea mays

<220>

<221> unsure  
<222> (1)...(127)  
<223> unsure at all n locations

<400> 396

gggataaaca ggccgaagaa aggtcctggg acatcaacct aggatgggtc ntagagccag 60  
tggttcgtgg tgactacccc ttctccatga gatcattggc tagggaacga ctacccttct 120  
tcaagga 127

<210> 397  
<211> 126  
<212> DNA  
<213> Zea mays

<400> 397

ctctagttct agctagctag caaagggggg gaaaatggct ccgcttctcg ctgctgccat 60  
gaaccacgct gcagcccatc ctggccttag gagccaccta gtaggacca acaatgagag 120  
tttctc 126

<210> 398  
<211> 238  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(238)  
<223> unsure at all n locations

<400> 398

cngnncgntg ggtcgaccca ccgcgtccgc nccaacgcgt ccgcggacgc gtgggcaaag 60  
cagctcaaag ctctagtact agctagctag caaagggggg gaanntggct ccgcttactc 120  
gctgctgcca tgaaccacgc tgcagcccat cctggcctta ggagccacct agtaggaccc 180  
aacaatgaga gtttctcacg gcaccacctg ccgtcttctt ctccacagag cagcaagg 238

<210> 399  
<211> 131  
<212> DNA  
<213> Zea mays

<400> 399

agaatactgc cgaagggaac caaagaagga ggtattaacc cggatggcat caagtactac 60



<212> DNA  
<213> Zea mays

<400> 403

ggacgcatag ggcttgcatt tgacgtaatg ggtcgtgtcc catacgaaaa gtcggcgttt 60  
acggatcaac aggccgaaca aaggctctgg gacattaacc taggatgggtt cttggagccg 120  
gttggttcgtg gt 132

<210> 404  
<211> 105  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(105)  
<223> unsure at all n locations

<400> 404

gaggctgttg atctttacaa caagcattac aagcgcgacg acaccgcat agggcttgcg 60  
nttgacgnaa tgggtcnggt gccatacgga anntccgttc nnggg 105

<210> 405  
<211> 92  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(92)  
<223> unsure at all n locations

<400> 405

ggagacatcg tttctggata aacaggccga agaaagggtcc tgggacatca acctaggatg 60  
gttcttagag ccagtngttc gtggtgacta cc 92

<210> 406  
<211> 443  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(443)  
<223> unsure at all n locations

<400> 406

gacaggggtga agaactgttt tancttcaac gagccgaggt gcgtcgngg tcngggctac 60  
gacaatggct tgcacgcacc gggaagggtgt tccgggtgcc ccgccggagg caactccacc 120  
acggagccgt accttgtcgc acaccatctc atcctttctc atgcagctgc ngtcaggcga 180  
taccgcgaca agtatcagct tcaccagaag gggaagattg gaattctcct ggatttcgtg 240  
tggtacgaac ctttcagcga cagcaatgcn gaccaggctg cagcacagcg agccagggac 300  
ttccacctaa gctggttcct tgacccatt gtcattgacc gtcccgact ngatgcaaga 360  
aaatgnccaa nacaagnttn ccgntgggtta accattgaaa aaaccncgat ggtgnaaagg 420  
tttatngacn atttttggnt tca 443

<210> 407  
<211> 291  
<212> DNA  
<213> Zea mays  
<220>  
<221> unsure  
<222> (1)...(291)  
<223> unsure at all n locations

<400> 407  
aactggttta cctttcaacg agccgaggtg cgtcgctgct ctgggctacg acaatggctt 60  
gcacgcaccg ggaagggtgtt ccgggtgcc ccgccggagg actccaccac ggagccgtac 120  
cttgtcgcac accatctcat cctttctcat gcagctgcgg tcaggcgata ccgcgacaag 180  
tatcagcttc accagaaggg gaagattgga atctcctgga tttcgtgtgg tacgaacctt 240  
tcagcgacan aatgcggacc aggctgcagc acagcgagcc aggattccac t 291

<210> 408  
<211> 256  
<212> DNA  
<213> Zea mays  
<220>  
<221> unsure  
<222> (1)...(256)  
<223> unsure at all n locations

<400> 408  
tgcgtcgctg ctctgggcta cgacaatggc ttgcacgcac cggaagggtg ttccgggtgc 60  
ccgccggag gaactccacc acggagccgt accttgtcgc acaccatctc atcctttctc 120

atgcagctgc tgtnaggnga taccgcnaca agtatnanct tcaccagaag gggaagattg 180  
 gaantattat agattttntg tngtangaac ctttatctac ancaatgcng acnangctgc 240  
 agcacagcna gccang 256

<210> 409  
 <211> 306  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(306)  
 <223> unsure at all n locations

<400> 409

acaccatctc atcctntctc atgcagctgc ngtcaggcga tnccgcgaca agtatcagct 60  
 tcaccagaag gggaagattg gaattctcct ggatttcgtg tggtagaac ctttcagcga 120  
 cagcaatgcg gaccaggctg cagcacagcg anccagggnc tttcacctag gctggttcct 180  
 tganccatt gtacatggac ggtaccgta ctcatgnaa gagatgccna agacaggnta 240  
 ccgttggtca gcatgnaga agccaggatg gtgaaangct ctatngatta tgttggcatc 300  
 aaccac 306

<210> 410  
 <211> 285  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(285)  
 <223> unsure at all n locations

<400> 410

cgacacccat ctcatccttt ctcatgcagc tgcggtcagg cgataccgcg acaagtatca 60  
 gcttcaccag aaggggaaga ttggnattct cctggatttt gtgtggtacg aacctttcag 120  
 cgacagcaat gcggaccagg ctgcagcaca gcgagccagg gacttccacc taggctgggt 180  
 ccttgacccc attgtacatg gacggtaccc gtactcgatg caagagattg ccaaagacag 240  
 gctaccgttg ttcagcgatn aagaagccag gatggtgaaa ggctc 285

<210> 411  
 <211> 202



<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(202)  
<223> unsure at all n locations

<400> 411

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ctggcagcac agcgagccag ggacttccac ctaggctggt tccttgaccc cattgtacat 120  
ggacggtacc cgtactcgat gcaagagatt gccaaagana ggctaccggt gttcagcgtg 180  
aagancccng gatggtgaaa gt 202

<210> 412  
<211> 427  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(427)  
<223> unsure at all n locations

<400> 412

gtctgccatg ggtcaaangg ctcan gcggg anttacgtcg ggcatc aaa ccactacacc 60  
cacgtactta cgcccagcaa ctttcgtcaa acgcccacag aagaccaa ac ttaccgcaan 120  
cgattgggaa tgcaaagatt tcgtatgagc gagatggtgt gccattggc aaaagggcgt 180  
actcggactg gctttacgtc gttccatggg ggctctacaa ggctctgatt tggaccaagg 240  
agaagttcaa cagccctgtg atgctcatcg gagagaacgg aattgaccag cctggaaatg 300  
agaccttgcc gttcgtctcg tacgacaagt tcaggataga ctacttcgag aagtacctgt 360  
acgagctcca gtgcgccata cgcgacggtg caaacgtctt cggtacttc gcgtgggtcg 420  
tgctgga 427

<210> 413  
<211> 292  
<212> DNA  
<213> Zea mays

<400> 413

agaccaacta ccgcaacgat tggaatgcaa agatttcgta tgagcgagat ggtgtgcccc 60

ttggcaaaag ggcgtactcg gactggcttt acgtcgttcc atgggggctc tacaaggctc 120  
 tgatttggac caaggagaag ttcaacagcc ctgtgatgct catcggagag aacggaattg 180  
 accagcctgg aaatgagacc ttgccgttcg ctctgtacga caattcagga tagactattc 240  
 gagaagtacc tgtacgagct ccagtggcgc catacgcgac ggtgcaaacg tc 292

<210> 414  
 <211> 467  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(467)  
 <223> unsure at all n locations

<400> 414

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 gagcgaactg cgagctgctg ccaccctgc tgccgcggtc gaccgccggc cccggaccga 120  
 gatggacgct cgggtgggagg tgctgctcgc gctgctggtc gccagcggcg gcgtccgtgt 180  
 ctgcgccgcc gctggggcca agggcgccaa ctggctgggc gggctgagcc gcgcgtcgtt 240  
 ccccaagggg ttcgtgttcg ggacggcgac gtnggcgtac caggtcgagg gcgccngntn 300  
 caccaacggn cggggcccct tcatctggga ttcatctcgc cacgttccaa gaaatattgc 360  
 anggaatcaa aatggaaacg tttcaatgga tcaataccat cgntncaagg aaanacgtcg 420  
 attctcatga aaaggttgaa cttttgatgc ctaccggntc tnaatnt 467

<210> 415  
 <211> 441  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(441)  
 <223> unsure at all n locations

<400> 415

ggcnagecag tgtggctgcc gcttnctctg cgagtnaggc gccatttaat aattcaattg 60  
 gaccnccaag cccacgcttc cgaattcacc gactcctcct ncacgccgcg tcgagatcgc 120  
 tcaggccttc gcttccagca actccaccac tcagnccacc cgccggagca atggggagca 180  
 cngggcgcca gccggagggt acccgcgccg acttncccga tggcttcgnc ttcggcggtg 240

ccacctgcgt gtaccagatt ganggagcga gaagggaggg aggcaaagga gacagcatat 300  
 gggatgtatt tacagatgac aaagaacatg tcttanacag aagcaatgga gaaattgcaa 360  
 gttgatcact accatcgatc aaggaaagac attgagctna tggcaaagtc taggnnttag 420  
 cgcatacaga tttctatatc t 441

<210> 416  
 <211> 407  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(407)  
 <223> unsure at all n locations

<400> 416

gggcgaagtt ccgtgctcgc gctgcttctc ctgctttccg ccggaggagc ccgagcgtcc 60  
 tacgacggcg agggcgaggc aggggcaggg gcagaggaga aggagaaggc tgcggcgtgg 120  
 acgggcgggc tgagccggcg gagctttccc aaggggttcg tgttcgggac ggcggcgtcg 180  
 gcctaccagg tggagggcat ggcgcacaag gacggccgcg ggccgagcat ttgggacgcc 240  
 ttcatacaaga tccccgtagt acacttgtat ggattgcata tgaaaatgca tcgatcgtgg 300  
 attgaattgg cttgacatgg ttggatnatg gcattggcaaa tggcggcgtc ctgcttttca 360  
 ggcgaaattc gcaaacaacg ccaaccgcgg acgttaactg ttgacga 407

<210> 417  
 <211> 307  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(307)  
 <223> unsure at all n locations

<400> 417

ctcgetcact tcttcccagc ggagtgcgca gtcgtcatgg ctaangctag ccgtggtcgt 60  
 gtcggcggcg gcgggcgaag ttccgtgctc gcgctgcttc tcttgccttc cgccggagga 120  
 gcccgagcgt cctacgacgg cgagggcgag gcaggggcag gggcagagga gaaggagaag 180  
 gctgcgncgt ggacggggcg gctgagccgg cggactttcc caaggggttc gtgttcggga 240



<220>  
 <221> unsure  
 <222> (1)...(450)  
 <223> unsure at all n locations

<400> 420

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 ataaactatc tgcttcagca aggcatgact ccttacatca acctttacca ctatgatctt 120  
 cctcttgccg ttgagaagaa atatggaggg tggttaagcg cgaagatggc ggacttgttt 180  
 acagactatg ctgacttctg ttttaagacc tacggcgatc gcgtaaagca ctgggtttaca 240  
 ttcaatgagc caaggatagt agcgctactt ggctatgaca caggggtcaaa tcctcctcaa 300  
 aggtgcacca gatgcgctgc tggtggaat tcagcaaccg aaccttacat agttgctcat 360  
 aattttctct tggcacatgc tactgcagtt gcaagatacc gtacgaaata tcangctgct 420  
 caaaanggta aggtccgaat agtcctggac 450

<210> 421  
 <211> 464  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(464)  
 <223> unsure at all n locations

<400> 421

tgcagttgca agataccgta cgaaatatca ggctgctcag aagggttaagg tcggaatagt 60  
 cctggacttc aactggtacg aggctcttac aaactcacct gatgaccaag cagcagccca 120  
 aagagccagg gacttccaca ttggctgggt tgttgatcca ttgataaacg gacactatcc 180  
 acagataatg caagatctcg tgaaggagag gctgcccagg ttcactcctg agcaggctaa 240  
 actggtgaag ggctcggcag actacatcgg tatcaacgag tacacattca gctacatgaa 300  
 ggggcagaag ctggtccagc tggcgcccag tagctactct gccgattggc aggttcaata 360  
 tgtttttgca cgcaatggca aaccgattgg accacaagcg aattctaaag tggctctaca 420  
 tngncccgac ngggatgtcc nggtgcgtga actancttaa gggg 464

<210> 422  
 <211> 471  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(471)  
 <223> unsure at all n locations

<400> 422

ccaagttcac tcctgagcag gctaaactgg gtgaagggct cggcagacta catcggatc 60  
 aacgagtaca catccagcta catgaagggg cagaagctgg tccagctggc gccagtagc 120  
 tactctgccg attggcaggt tcaatatgtt tttgcacgca atggcaaacc gattggacca 180  
 caggcgaatt ctaagtggct ctacatcgcc ccgacgggga tgtacgggtg cgtgaactac 240  
 ctcaaggaga agtatgggaa tccaacgatc tacataacgg aagaacggaa tggaccagcc 300  
 tggaaacttg acccgagacc agtacctgcg cgacgccacg aggggtgcgg tctacaggag 360  
 ctacatcggc caactgaaga aaggccatag accaagggag cgaacgtggc tgggctactt 420  
 cgccctgggt ctctcctccn acaacttcga ntggctggca agggttactc c 471

<210> 423  
 <211> 465  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(465)  
 <223> unsure at all n locations

<400> 423

cagaagggta aggtcggaat agtcctggac ttcaactggc acgaggctct taaaaactca 60  
 cctgatgacc aagcagcagc ccaaagagcc agggacttnc acattggctg gggtttgtga 120  
 tccattgata aacggacact atccacagat aatgcaagat ctctgaagg agaggctgcc 180  
 caggttcact cctgagcagg ctaaactggg tgaaagggct cggcagacta catcggatc 240  
 aacgaagtac acattcagct acatgaaggg gcagaagctg gtccagctgg cncccaatag 300  
 ctactctgcc gattggcagg ttcaatatgt ttttgcacgc aatggcaaac cgattggacc 360  
 acaggcgaat tctaaagtgg ctctacattg ccccgacggg gatgtacngg tgcgtgaact 420  
 acctcaagga gaagtatggg aatncaacga tctacataac ggaga 465

<210> 424  
 <211> 463  
 <212> DNA



atcttcccgg atggcggaagg gaaagtcant ccagaaggtg tagccgtatt acaatagttn 60  
gataaactat ctgcttcagc aaggcatgac tccttacatc aacctttacc actatgatct 120  
tnctcttgcg cttgagaaga aatatggagg gtggttaagc gcgaagatgg cggacttggt 180  
tacagactat gctgacttct gttttaagac ctacngcgat cgcgtaaagc actgggtttac 240  
attcaatgag ccaaggatag tagcgctact tggctatgac acaggggtcaa attctcctca 300  
aaggtgcacc aaatgcnctg ctggtnggaa ttcagcaacc gancnttaca tatttgctca 360  
taattatctn ttggcacatn ctantncagt tgcnnagatn ccggacgaan ttnnngctgc 420  
tcanaaanng ttagngtnag gaattantcc tgg 453

<210> 427  
<211> 377  
<212> DNA  
<213> Zea mays  
<220>  
<221> unsure  
<222> (1)...(377)  
<223> unsure at all n locations  
<400> 427

ctacctcaag gagaagtatg ggaatccaac gatctacata acggagaacg gaatggacca 60  
gcctggaaac ttgacccgag accagtacct gcgcgacgcc acgaggggtgc gggtctacag 120  
gagctacatc ggccagctga agaaggccat agaccagggg gcgaacgtgg ctggctactt 180  
ctcctggtct ctcctcgaca attcgagtgg ctggcaggggt actcgtccaa gttcggcatc 240  
gtctacgtgg acttcaacac gctcgaacgc caccogaagg cgtcggccta ctngttcang 300  
gacatgcttc agaagcattg agatctccag agccgagcct gagcacggaa ngtagcattt 360  
tggttcagctt cgcttag 377

<210> 428  
<211> 302  
<212> DNA  
<213> Zea mays  
<400> 428

cggacttggt tacagactat gctgacttct gttttaagac ctacggcgat cgcgtaaagc 60  
actgggtttac attcaatgag ccaaggatag tagcgctact tggctatgac acaggggtcaa 120  
atcctcctca aaggtgcacc agatgcgctg ctggtgggaa ttcagcaacc gaaccttaca 180



tagttgctca taattttctc ttggcacatg ctactgcagt tgcaagatac cgtacgaaat 240  
 atcaggctgc tcagaagggt aaggctcgaa tagtcctgga cttcaactgg tacgaggctc 300  
 tt 302

<210> 429  
 <211> 455  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(455)  
 <223> unsure at all n locations

<400> 429

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 gaccgggatn taccgggtnc ctinnacctan cttaagggan aaagatnggg aatccaacga 120  
 tctacataac ggagaacgga atggaccaac ctggaaactt gacccgagac cagtacctgc 180  
 gcgacgccac gaggggtgcgg ttctacagga gctacatcgg ccagctgaag aaggccatag 240  
 accagggagc gaacgtggct ggctacttcg cctggtctct cctcgacaac ttcgagtggc 300  
 tggcagggta ctctgtccaag ttcggcatcg tctacgtgga cttcaacacg ctcgaacgcc 360  
 acccgaaggc gtcggcctac tggttcaagg gacatgcttc agaagcattg agatctncag 420  
 agcccgagcc tgagcacgga aggtaccatt tttgt 455

<210> 430  
 <211> 312  
 <212> DNA  
 <213> Zea mays

<400> 430

cagaagggtta aggtcggat agtcctggac ttcaactggt acgaggctct taaaaactca 60  
 cctgatgacc aagcagcagc ccaaagagcc agggacttcc acattggctg gtttgttgat 120  
 ccattgataa acggacacta tccacagata atgcaagatc tcgtgaagga gaggctgccc 180  
 aggttcactc ctgagcaggc taaactggtg aagggtctcg cagactacat cggatatcaac 240  
 gagtacacat ccagctacat gaaggggcag aagctggtcc agctggcgcc cagtagctac 300  
 tctgccgatt gg 312

<210> 431  
 <211> 305  
 <212> DNA  
 <213> Zea mays

<400> 431

cgaaatatca ggctgctcag aagggttaagg tcggaatagt cctggacttc aactggtacg 60  
 aggctcttac aaactcacct gatgaccaag cagcagccca aagagccagg gacttccaca 120  
 ttggctgggtt tgttgatcca ttgataaacg gacactatcc acagataatg caagatctcg 180  
 tgaaggagag gctgcccagg ttactctctg agcaggctaa actggtgaag ggctcggcag 240  
 actacatcgg tatcaacgag tacacatcca gctacatgaa ggggcagaag ctggtccagc 300  
 tggcg 305

<210> 432  
 <211> 299  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(299)  
 <223> unsure at all n locations

<400> 432

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 aatagtcctg gacttcaact ggtacgaggc ttttacaac tcacctgatg accaagcagc 120  
 agcccaaaga gccagggact tccacattgg ctggtttggt gatccattga taaacggaca 180  
 ctatccacag ataatgcaag atctcgtgaa ggagaggctg cccagggttca ctcttgagca 240  
 ggctaaactg gtgaanggct cggcagacta catcggtatc aacgagtaca catccagct 299

<210> 433  
 <211> 323  
 <212> DNA  
 <213> Zea mays

<400> 433

gctggtccag ctggcgccca gtagctactc tgccgattgg caggttcaat atgtttttgc 60  
 acgcaatggc aaaccgattg gaccacaggc gaattctaag tggctctaca tcgccccgac 120  
 ggggatgtac gggcgcgtga actacctcaa ggagaagtat gggaatccaa cgatctacat 180  
 aacggagaac ggaatggacc agcctggaaa cttgacctga gaccagtacc tgcgcgacgc 240

cacgaggggtg cggttctaca ggagctacat cggccagctg aagaaggcca tagaccaggg 300  
agcgaacgtg gctggctact tcg 323

<210> 434  
<211> 295  
<212> DNA  
<213> Zea mays

<400> 434  
ggcgaattct aagtggctct acatcgcccc gacggggatg tacgggtgcg tgaactacct 60  
caaggagaag tatgggaatc caacgatcta cataacggag aacggaatgg accagcctgg 120  
aaacttgacc cgagaccagt acctgcgcga cgccacgagg gtgcgggttct acaggagcta 180  
catcgccag ctgaagaagg ccatagacca gggagcgaac gtggctggct acttcgcctg 240  
gtctctcctc gacaacttcg agtggctggc aggggtactcg tccaagtctg gcac 295

<210> 435  
<211> 287  
<212> DNA  
<213> Zea mays

<400> 435  
tcttctctct gcgcttgaga agaaatatgg aggggtggtta agcgcaaga tggcggactt 60  
gtttacagac tatgctgact tctgttttaa gacctacggc gatcgcgtaa agcactgggt 120  
tacattcaat gagccaagga tagtagcgct acttggtat gacacagggt caaatcctcc 180  
tcaaagggtgc accagatgcg ctgctgggtgg gaattcagca accgaacctt acatagttgc 240  
tcataatctt ctcttggcac atgctactgc agttgcaaga taccgta 287

<210> 436  
<211> 472  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(472)  
<223> unsure at all n locations

<400> 436  
gggacnncga gattnantgg tttgtcagat ccattgataa acnggacact annacacat 60  
gggtnnngga tntnatnaag gagagcctgc ccanttcac tcctgagcag nctagactgg 120

ngaagggctc ganagactac atcggtatca acgagtacac atccagctac atgaaggggc 180  
 anaagctggg ccanntgctc ccagtancta ctctgccgat tggcagggttc aatatgngtt 240  
 tgcacgcaat gncanaccga ttggaccaca gnnaagttct aagtggctct acatcgcccn 300  
 nacgggggatg tacgggtgctg tgaactacct caangagaag tatgngaate caacggatct 360  
 acataacgga gaacggaatg gaccaacctg gaaacttgac ccgagaccag tacctgctcg 420  
 annccacgaa ngtgcggntc tacaggaact acatnggccca tntnaataaa gg 472

<210> 437  
 <211> 301  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(301)  
 <223> unsure at all n locations  
 <400> 437

agataccgta cgaaanatca ggctgctcag aagggttaagg tcggaatagt cctggacttc 60  
 aactggtacg aggctcttac aaactcacct gatgaccaag cagcagccca aagagccagg 120  
 gacttccaca ttggctgggt tgttgattcc attgataaac ggacactatc cacagataat 180  
 gcaagatctc gtgaaggaga ggctgcccgag gtctactcct gagcaggcta aactggtgaa 240  
 aggctcggca gactacatcg gtatcaacga gtacacatcc agctacatga aggggcagaa 300  
 g 301

<210> 438  
 <211> 297  
 <212> DNA  
 <213> Zea mays

<400> 438  
 caagcagcag cccaaagagc cagggacttc cacattggct ggtttgttga tccattgata 60  
 aacggacact atccacagat aatgcaagat ctctgaagg agaggctgcc cagggttact 120  
 cctgagcagg cttaaactggg gaagggctcg gcagactaca tcggtatcaa cgagtacaca 180  
 tccagctaca tgaaggggca gaagctggtc cagctggcgc ccagtagcta ctctgccgat 240  
 tggcagggttc aatatgtttt tgcacgcaat ggcaaaccga ttggaccaca ggcgaat 297



<400> 441  
 gggacttcca cattggctgg tttgttgatc cantgataaa cggacactat ccacagataa 60  
 tgcaagatct cgtgaaggag aggctgcca ggttcactcc tgagcaggct aaactgggtga 120  
 agggctcggc agactacatc ggtatcaacg agtacacatc cagctacatg aaggggcaga 180  
 agctgggtcca gctggcgccc agtagctact ctgccgattg gcagggtcaa tatgtttttg 240  
 cacgcaatgg caaaccgatt ggaccacagg cgaattctaa gtggctctac atcg 294

<210> 442  
 <211> 471  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(471)  
 <223> unsure at all n locations

<400> 442  
 gcgtccacca acggccgggg cccctccatc tgggattcat tcgcgcacgt cccaggaaat 60  
 attgcnngga atcaaaatgg agacgttgca gtggatcaat accatcgcta caaggaagac 120  
 gtcgatctca tgaaaagttt gaactttgat gcctaccggt tctcaatctc atggtccagg 180  
 atcttcccg atggcggaagg gaaagtcaat ccagaagggt tagcgtatta caataatttg 240  
 ataaactatc tgcttcagca aggcattgact ccttacatca acctttacca ctatgatctt 300  
 cctcttgccg ttgagaagaa atatgggagg gtgggttaagc cgcgaaagat ggcgggactt 360  
 ggttacagac tatgctgact tctggtttaa gacctacggn gaatcgcgtn aaagcactgg 420  
 gttacanttc atgngnccaa ggtagtagacc gctacttggg ttttnaaca g 471

<210> 443  
 <211> 452  
 <212> DNA  
 <213> Zea mays  
 <220>  
 <221> unsure  
 <222> (1)...(452)  
 <223> unsure at all n locations

<400> 443  
 gttcttgatc agattgttga cttttatttg nnnnggncaga aagntanngn cnggaanagt 60

cctggacttc aacnggtacg aggtctttac aaactcacct gatgaccaag caancancnn 120  
 aanagccag gnacttgac atnggcnggn nngtagatcc attgataaac ggacactatc 180  
 cacagataan gcaagatctc gcgaaggaga ggctgccag gttcactccn gagcaggcta 240  
 aactggtgaa gggctcgnca gactacatcn gtatcaacga gtacacatcc aactacatga 300  
 anggggcana anctgganca gctggccccc agganctact ctgccgaatg gcagggttcaa 360  
 tatgtntttg cacgcaatgg caaaccatt ggaccacaag ccaatctaag nggctctana 420  
 tngccccgac cgggattgta cnggtncctg aa 452

<210> 444  
 <211> 264  
 <212> DNA  
 <213> Zea mays

<400> 444

cagaagggtg aggtcggat agtcctggac ttcaactggt acgaggctct taaaaactca 60  
 cctgatgacc aagcagcagc ccaaagagcc agggacttcc acattggctg gtttgttgat 120  
 ccattgataa acggacacta tccacagata atgcaagatc tcgtgaagga gaggctgccc 180  
 aggttcactc ctgagcaggc taaactggtg aagggtcgg cagactacat cggtatcaac 240  
 gagtacacat ccagctacat gaag 264

<210> 445  
 <211> 263  
 <212> DNA  
 <213> Zea mays

<400> 445

ggctatgaca cagggtcaaa tcctcctcaa aggtgcacca gatgcgctgc tgggtgggaat 60  
 tcagcaaccg aaccttacat agttgctcat aattttctct tggcacatgc tactgcagtt 120  
 gcaagatacc gtacgaaata tcaggctgct cagaagggtg aggtcggat agtcctggac 180  
 ttcaactggt acgaggctct taaaaactca cctgatgacc aagcagcagc ccaaagagcc 240  
 agggacttcc acattggtgg ttt 263

<210> 446  
 <211> 297  
 <212> DNA  
 <213> Zea mays

<400> 446

gatgaccaag cagcagccca aagagccagg gacttccaca ttgggctggt ttgttgatcc 60  
 attgataaac ggacactatc cacagataat gcaagatctc gtgaaggaga ggctgcccag 120  
 gttcactcct gagcaggcta aactggtgaa gggctcggca gactacatcg gtatcaacga 180  
 gtacacatcc agctacatga aggggcagaa gctggtccag ctggcgccca gtagctactc 240  
 tgccgattgg cagttcaata tgtttttgca cgcaatggca aaccgattgg accacag 297

<210> 447  
 <211> 298  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(298)  
 <223> unsure at all n locations

<400> 447

cggacacnat ccacagataa tgcaagatct cgtgaaggag aggctgcccga ggttcactcc 60  
 tgagcaggct aaactggtga agggctcggc agactacatc ggtatcaacg agtacacatc 120  
 cagctacatg aaggggcaga agctggtcca gctggcgccc agtagctact ctgccgattg 180  
 gcaggttcaa tatgtttttg cacgcaatgg caaaccgatt ggaccacagg cgaattctaa 240  
 gtggctctac atcgccccga cggggatgta cgggtgcgtg aatcacctcn aggagaag 298

<210> 448  
 <211> 301  
 <212> DNA  
 <213> Zea mays

<400> 448

cactcctgag caggctaaac tgggtgaagg ctcggcagac tacatcggtg tcaacgagta 60  
 cacatccagc tacatgaagg ggcagaagct ggtccagctg gcgcccagta gctactctgc 120  
 cgattggcag gttcaatatg tttttgcacg caatggcaaa ccgattggac cacaggcgaa 180  
 ttctaagtgg ctctacatcg ccccgacggg gatgtacggg tgcgtgaact acctcaagga 240  
 gaagtatggg aatccaacga tctacataac ggagaacgga atggaccagc ctggaaactt 300  
 g 301

<210> 449  
 <211> 322





<220>  
 <221> unsure  
 <222> (1)...(272)  
 <223> unsure at all n locations

<400> 451

gtcgggaatag tctctgggact tcaactggta cgaggctctt acaaactcac ctgatgacca 60  
 agcagcagcc caaagagcca gggacttcca cattggctgg tttgttgatc cattgataaa 120  
 cggacactat ccacagataa tgcaagatct cgtgaaggag aggctgcccc gggttactcc 180  
 tgnncaggct aaactggtga agggctcggc agactacatc ggtatcaacg agtacacatc 240  
 cagctacatg aaggggcaga agctggtcca gc 272

<210> 452  
 <211> 447  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(447)  
 <223> unsure at all n locations

<400> 452

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 tgggacgcgt tcgtgcacac cccaggaaac attgtataca atcagacggc agatgtcgca 120  
 gtggatcaat atcatcgcta caggggaagat gtcgacctca tgaaaagttt gaattttgat 180  
 gcctaccgggt tttcaatctc atgggtccagg atcttcccag atggcgaggg aagagtcaat 240  
 ccagaagggtg ttgcctatta caacaatctg ataaactacc tgcttcggaa aggcattaca 300  
 ccgtacgcca atccttacca ttcccgatcc tcccctcttg cgcttcaaga acaagtatgg 360  
 gaggggtgggt taaatngcca agatggcgaa nactgttcac aagnctangc cgaacttccg 420  
 gttttaaaga ctttggggga accgtng 447

<210> 453  
 <211> 244  
 <212> DNA  
 <213> Zea mays

<400> 453

cgtagcaaat atcaggctgc tcagaagggt aaggctcgaa tagtcctgga cttcaactgg 60  
 tacgaggctc ttacaaactc acctgatgac caagcagcag cccaaagagc cagggacttc 120

cacattggcg gtttgttgat ccattgataa acggacacta tccacagata atgcaagatc 180  
 tcgtgaagga gaggctgccc aggttcactc ctgagcaggc taaactgggtg aagggctcgg 240  
 caga 244

<210> 454  
 <211> 258  
 <212> DNA  
 <213> Zea mays

<400> 454

gcaagatctc gtgaaggaga ggctgcccag gttcactcct gagcaggcta aactggtgaa 60  
 gggctcggca gactacatcg gtatcaacga gtacacatcc agctacatga aggggcagaa 120  
 gctgggtccag ctggcgccca gtagctactc tgccgattgg caggttcaat atgtttttgc 180  
 acgcaatggc aaaccgattg gaccacaggc gaattctaag tggctctaca tcgccccgac 240  
 ggggatgtac ggggtgcgt 258

<210> 455  
 <211> 263  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(263)  
 <223> unsure at all n locations

<400> 455

acggacacta tccacagata atgcaagatc tcgtgaagga gaggctgccc aggttcactc 60  
 ctgagcaggc taaactgggtg aagggctcgg cagactacat cggatatcaac gactacacat 120  
 ccagctacat gaaggggcag aagctgggtcc agctggcgcc cagtagctac tctgccgatt 180  
 ggcaggttca atatgttttt gcacgcaatg gcaaaccgat tggaccacag gcgaattcta 240  
 agtggctcta catcgccccg ang 263

<210> 456  
 <211> 266  
 <212> DNA  
 <213> Zea mays

<400> 456

gcaaccgaac cttacatagt tgctcataat tttctcttgg cacatgctac tgcagttgca 60



<223> unsure at all n locations

<400> 459

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gtggctctac atcgcccnga cggggatgta cgggtgctg aactacctca aggagaagta 60
tggaatcca acgatctaca taacggagaa cggaatggac cagcctggaa acttgacccg 120
agaccagtac ctgcgctacg ccacgagggt gcngttctac angagctaca tcggccagct 180
naagaaggcc atagacnagg gancgaannt ggnttgntac ttcgntntgg tctcttctcg 240
acaacttnga gtggctggca nnnngtncttn gtttaangtt tggcattagt taccgtggac 300
ttnaanacgc tcgaacttca ccctaaaggc gtcngnctac tggttcaagg ganatgcttt 360
nataagcant tgagatcttt ngtangccna nctgaacacc ggnaaggtcc atttttnttt 420
aactttngcc taaatggtnn ggaatgggcc aatggtttaa anttcgggtt aatggcttgg 480
tt 482
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<210> 460  
<211> 223  
<212> DNA  
<213> Zea mays

<400> 460

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ggtccagctg gcgcccagta gctactctgc cgattggcag gttcaatatg tttttgcacg 60
caatggcaaa ccgattggac cacaggcgaa ttctaagtgg ctctacatcg ccccgaaacgg 120
ggatgtacgg gtgcgtgaac tacctcaagg agaagtatgg gaatccaacg atctacataa 180
cggagaacgg aatggaccag cctggaaact tgacccgaga cca 223
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<210> 461  
<211> 274  
<212> DNA  
<213> Zea mays

<400> 461

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aaaatggaga cgttgcagtg gatcaatacc atcgctacaa ggaagacgtc gatctcatga 60
aaagtttgaa ctttgatgcc taccggttct caatctcatg gtccaggatc ttcccggatg 120
gcgaagggaag agtcaatcca gaagggtgtag cgtattacaa taatttgata aactatctgc 180
ttcagcaagg catgactcct tacatcaacc tttaccacta tgatcttctt cttgcgcttg 240
agaagaaata tggagggtgg ttaagcgcca agat 274
```

<210> 462  
 <211> 196  
 <212> DNA  
 <213> Zea mays

<400> 462

cccaggttca ctctgagca ggctaaactg gtgaagggct cggcagacta catcggtatc 60  
 aacgagtaca catccagcta catgaagggg cagaagctgg tccagctggc gcccagtagc 120  
 tactctgccg attggcaggt tcaatatgtt tttgcacgca atggcaaacc gattggacca 180  
 caggcgaatt ctaagt 196

<210> 463  
 <211> 184  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(184)  
 <223> unsure at all n locations

<400> 463

aganatatgg aggggtggtta agcgcgaaga tggcggactt gtttacagac tatgctgact 60  
 tctgttttaa gacctacggc gatcgcgtaa agcactgggt tacattcaat gagccaagga 120  
 tagtagcgcct acttggttat gacacagggg caaatcctcc tcaaaggtgc accagatgcg 180  
 ctgg 184

<210> 464  
 <211> 192  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(192)  
 <223> unsure at all n locations

<400> 464

gaaggagagg ctgcccaggt tcaactcctga gcaggctaaa ctggtgaagg gctcggcaga 60  
 ctacatcggc atcaacgagt acacatccag ctacatgaag gggcagaagc tggcagct 120  
 ggcgcccagt agctactctg ccgattggca ggttcaatat gtttttgcac ncnatggcaa 180  
 accgattgga cc 192

<210> 465  
 <211> 354  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(354)  
 <223> unsure at all n locations

<400> 465

aaaaacatag gctgctcaga agggtaagggt cggaatagtc ctgganttca actggtacga 60  
 ggctcttaca aactcacctg atgaccaagc agcaacncaa agagccagggt acttccacat 120  
 tggctgggttt gtngatncat tgataaacgg acatatccnc agataatgca agatctcgtg 180  
 aaggagaggt gcccagggtnc acnctgagna ggctaaactg gtgaagggnn tnggnagact 240  
 acatcgtntc acggagtaca cntcnagtac angaaggggc aaaactgggtc cagtgnngcc 300  
 cantagtact ntccngnttg gcaggntcat atgttgngat taatncttgt nttt 354

<210> 466  
 <211> 266  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(266)  
 <223> unsure at all n locations

<400> 466

ccgcgcgtcg ttccccaagg ggttcgtggt cgggacggcg acgtcggcgt accagggtcga 60  
 gggcgccgcg tccaccaacg gccgngccc ctccatctgg gattcantcg cgcacgtccc 120  
 aggaaatatt gcagggaatc aaaatggaga cgttgcagtg gatcaatacc atcgctacaa 180  
 ggaagacgtc gatctcatga aaagtttgaa ctttgatgcc taccggttct caatctcatg 240  
 gtccaggatc ttcccggatg gcgaag 266

<210> 467  
 <211> 286  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(286)

<223> unsure at all n locations

<400> 467

gnnaccgana cttacatagt tgcncataat tnnnctcntg gcacangcta ctgcngttgc 60  
nagataccgt acganatatac aggctgctca gaagggtgaag gtcggantag tcctggactt 120  
naantgggtan gaggtcttta caaactcacc tgatgngcca agcagcagcc caaagagcca 180  
gggacttcca cattggctgg tttgttgatc cattgataaa cggacactat ccacagataa 240  
tgcaagatct cgtgaaggag aggctgcccc ggttcactcc tgagca 286

<210> 468

<211> 351

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(351)

<223> unsure at all n locations

<400> 468

ggcggacttg tttacagact atgctgactn ctgttttaag acctacggcg atcgcgтана 60  
gcactgggnt acnttncaat gagccaagggn nagaggcgct acttggctat gacacagggt 120  
caaatcctcc tcaaagggtgc accagatgcg cngctgggtgg gattcngcna ccgaaccnta 180  
catngttgct cataatntnc ncttggcaca tgctactgtn ttgcaaganc cggacganaa 240  
tcaggctgct cagaagggna ggtnggaata cccnggnttc cantgnctag gncgtncnaa 300  
tcactgatga cnagcgagna gcccnaaagn cagggtctnn acattgcggn t 351

<210> 469

<211> 197

<212> DNA

<213> Zea mays

<220>

<221> unsure

<222> (1)...(197)

<223> unsure at all n locations

<400> 469

ctttgatnac ctaccgggttc tcaatctcat ggtccaggat cttcccngat ggcgaaggga 60  
aagtcaatcc agaagggtga gcgtattaca ataatttgat aaactatctg cttcagcaag 120  
gcatgacncc cttacatcaa cctttaccac tatgatntc ctcttgcgct tgagaagaaa 180



tatggagggt ggttaag 197

<210> 470  
<211> 245  
<212> DNA  
<213> Zea mays

<400> 470

cgctacaagg aagacgtcga tctcatgaaa agtttgaact ttgatgccta cgggttctca 60  
atctcatggt ccaggatctt cccggatggc gaagggaaaag tcaatccaga aggtgtagcg 120  
tattacaata atttgataaa ctatctgctt cagcaaggca tgactcctta catcaacctt 180  
taccactatg atcttctctt tgcgcttgag aagaaatatg gaggggtggtt aagcgcgaag 240  
atggc 245

<210> 471  
<211> 166  
<212> DNA  
<213> Zea mays

<220>  
<221> unsure  
<222> (1)...(166)  
<223> unsure at all n locations

<400> 471

gnnncgttgc agtggatcaa taccatcgct acaaggaaga cgtcgatctc atgaaaagtt 60  
tgaactttga tgcctaccgg ttctcaatct catgggtccag gatctncccg gatggcgcnag 120  
ggaaagtcaa tccagaagggt gtagcgtatt acaataattt gataaa 166

<210> 472  
<211> 99  
<212> DNA  
<213> Zea mays

<400> 472

gcgtattaca ataatttgat aaactatctg cttcagcaag gcatgactcc ttacatcaac 60  
ctttaccact atgatcttcc tcttgcgctt gagaagaaa 99

<210> 473  
<211> 455  
<212> DNA  
<213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(455)  
 <223> unsure at all n locations

<400> 473

gaaaagtttg aactttgatg cctaccggtt ctcaatctca tggncanga tctttccggn 60  
 tggngaaaagg aaangcaatc caaaaagggt aaccgnatta caataatttg gtaaactatn 120  
 tgggtttaaca agggntgnaa ttcttanatt aaaccttacc cctattgaac tttccttttg 180  
 cgccttgnaa agaaaatatn ggaggggtggg nttaancccc aaaaatggcg ggactttggt 240  
 tacaggacta tgctgacttc tgggtttaag acctacggcg atcgcgtaaa gactggggtt 300  
 tacattcaat gagccaagga tagtaaccgc tacttggtta tgacacangg tcaaactcctt 360  
 ctcaaangtg caccagatgc gctgctgggtg ggaattcaag caaccgaac cttacataag 420  
 ttgctcataa ttttctcttt tngggggcac atgct 455

<210> 474  
 <211> 315  
 <212> DNA  
 <213> Zea mays

<400> 474

ggccaagcta gtcaagggtt catcaggtgt gaaattggta gccggtcttt cacaatgtct 60  
 tgcattatct ttggatattg cccatttatt aatggatcaa gaaaccaacc aatatggaag 120  
 tccttgccc tttgcgctgc tttttgatct tcagttgagt ttgtaaaagg ttcataaccag 180  
 ttgaagtcaa gaactatccc gaccttgctt ttctgagttg cctgggtattt attgcggtat 240  
 cttgcaactg cagtagcatg agataggaga atgttatgaa caacaatgta aggttctgtc 300  
 gatgagttcc caccg 315

<210> 475  
 <211> 285  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(285)  
 <223> unsure at all n locations

<400> 475



<212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(434)  
 <223> unsure at all n locations

<400> 478

ccctatagtn agtcgtatta aaagcgcggc ctgtgtctcc ggcctttgcc gcttccacag 60  
 ggagtcgggg gccatgcatg agctccgtaa agctcgcggg gcttgctcta ctgctagcgg 120  
 naggcagctca ccacgggtctg ctgccgctgc cgacgggcgg atgctactgg ctcaaccggg 180  
 agatctacga cgccggcggg ctgagccgcc gcgcgttccc ggacagnttc gtcttcggga 240  
 cggccggcgt cggcgtagca gggtcganng ggatggccan gcacaggcgg ngcgggngcn 300  
 ccangcatct gggangcctt catnggaggn tcctggganc agccnaana ntgncaccnc 360  
 ggnccgnnagc gtcnagcaat tatcagcggg ttcaanggna cgatgntnga gnnnnngaaa 420  
 gagcatgngg cttt 434

<210> 479  
 <211> 233  
 <212> DNA  
 <213> Zea mays

<220>  
 <221> unsure  
 <222> (1)...(233)  
 <223> unsure at all n locations

<400> 479

cagacgctng gcgagnaatc atcgaagact tcaccgcgta cncagacgtg tncttccgga 60  
 gcttcggcga aaggggtgaag cactggatca cgggtgaacga gcccaacatc gagcccatcg 120  
 gcggctacga ccaaggctac ctcccgccgc gccgctgctc ctaccggtt ggactggggcg 180  
 tcaatgcacc cacggcaact ccacgacgga nccgtagccg tcncccanca cct 233

<210> 480  
 <211> 268  
 <212> DNA  
 <213> Glycine max

<400> 480

ctttattgca gaacgtgttg ggggtgcatgt tgtggagtgt gcttgtgtga ttgaattgcc 60

agagttaaag gggcgggaaa ggttgggaga caagtcgcta tttgtcttga ttaatggggg 120  
 agcctgatct tttttccaag tgattgtgtt tttattagct ggctcttggt aggagcttta 180  
 ttgatgactg cttagatttc cttaaagatac attttgatgc tgcggaaacg gaaagcgtgc 240  
 tttgtttgag cgcgctcagt tctgctca 268

<210> 481  
 <211> 227  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(227)  
 <223> unsure at all n locations

<400> 481

aatgtttcaa gacataacga cattgttggt ggatcacaag gcgttttaaag acactgtcga 60  
 cntttttgtc gatcggtaca gagacatggc acatttccgt tggtgccgga attgaggcta 120  
 gggggttcat gtttggtccc tcaattgcgt tgggcattgg tgcaaagttt gttccnttac 180  
 gcaaacacgg aagctgccan gtgaagtaat ttcagnaaaa tatgctc 227

<210> 482  
 <211> 259  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(259)  
 <223> unsure at all n locations

<400> 482

cgactntcnt aagccaggaa tnttgnntna ggacataacc acgctgcttc nggatnccaa 60  
 aggctttcaa agacaccatt gacntgtttg nngagaggta cagagatcaa aacatcaatg 120  
 tngtcgcagg agttgaagct agaggcttta tatttggtcc acccagtgc ntaggcantg 180  
 gagcaaaant tgtccccang agganacca anaaattgcc gggggngggt atncagagg 240  
 ggtatcnttg gnggaggga 259

<210> 483  
 <211> 142  
 <212> DNA  
 <213> Glycine max

<400> 483  
aatggagatg catgtagggg ctgtacaacc tggagaacga gccttaatca tagatgatct 60  
tattgccact gggggaacgt taggtgcagc aattaagctt ctagaacgtg ttgggggtgca 120  
tgttgtggag tgtgctgtgt ga 142

<210> 484  
<211> 270  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(270)  
<223> unsure at all n locations

<400> 484  
tttttctctc tgtactcaga ctcaactccc cacttattta tacantgtcg gcttacaaag 60  
accaggatac ccgtcttcat ngcatcanan ctaaggtneg tgcgtcccc aatttcccca 120  
gatccggaat tgaagctcga ggttttattt ttggctctcc cattgcgctg gctataggag 180  
caaagtttgt accattgagg aaaccaaagg agttgcctgg aaaagttatt tctcangaat 240  
atattctgga atatggaagg gactgtcttg 270

<210> 485  
<211> 247  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(247)  
<223> unsure at all n locations

<400> 485  
gactnttcna acataatacn nttnttcgn ttgtgnttgg ttgcgcacgc aagnacgtta 60  
caataatggc ttcgaagnat tctcaacaag acacgcgctt agcgannatc gcctctgcaa 120  
tccngtcat ccccgacttt cctaagccag ggnttttgtg ncaggacata accncgntgc 180  
ttcttgntac naaggctttc naagacacca ttganttgn tgtngagagg tacagaganc 240  
aaaacat 247

<210> 486

<211> 268  
 <212> DNA  
 <213> Glycine max  
 <400> 486  
 ttgatacaaa ggctttcaaa gacaccgttg acttgtttgt tgagaggtag agagatcaaa 60  
 acatcaatgt tgtcgcagga gttgaagcaa ggggctttat atttgggtcca cccattgcat 120  
 tagctattgg agcaaaatgt gtcccatga ggaaacccaa taaattgcct ggggaggtta 180  
 tctcagaaga gtattctttg gagtatggaa cagacaaaat ggagatgcat gtaggggctg 240  
 tacaacctgg agaacgagcc ttaatcat 268

<210> 487  
 <211> 261  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(261)  
 <223> unsure at all n locations

<400> 487  
 ggtgctgaag tgggtggaatg tgccgtgtgc attggtgtgc ctgatgtcaa ggggcagtgc 60  
 aggcgtattg gaaagccact ttatgttctt gttgagccgc gtaaagcaga taaatgttac 120  
 ccagattgac atactaaagg acgctgggtg tgagnnacac aggcataat gtgaccta 180  
 agttttaggc tgatggagtc gtgttcatgg caattgtcaa atatcatcct gggaaatgtt 240  
 catcctgttt catatcttat c 261

<210> 488  
 <211> 283  
 <212> DNA  
 <213> Glycine max  
 <400> 488  
 gttcctttac gcaaaccacg gaagctgcc a ggtgaagtaa tttcagaaaa atatgctcta 60  
 gaatatggaa ctgattgctt ggagttgcat gttggtgctg cccagcccgg tgaacgggcc 120  
 ataataattg atgacttggt ggccacaggt ggaactctgt cagcaggagt aaaacttcta 180  
 gaacgtgttg gggctgaagt ggtggaatgt gctgtgtcat tgggtgtgcc atgtcaagg 240  
 gcatgcagga gtattggaaa gccactttat gttctgttga gcc 283







<210>	494
<211>	306
<212>	DNA
<213>	Glycine max

```
<220>
<221>      unsure
<222>      (1)...(306)
<223>      unsure at all n locations
```

ctttcttttg	ctcttcaccc	attccacacc	aaaaagtaac	agtttcngtt	tcggagggaa	60
aacacaaanac	aaaaagcccc	ctccccccaa	agcaaatacac	cttttttttct	ttcagttatt	120
caaaaaaatgt	tcgccgaaga	gaatggactc	aaggagagacc	ctagactcca	agccattttcc	180
caagccatca	gagtcgtccc	tcacttcccc	atacatggaa	taatgtttcc	agacataacg	240
acattgttgt	tggatcacia	ggcgttttaa	gacactgtcg	acatttttgt	ngatcgttac	300
agagac						306

<210>	495
<211>	281
<212>	DNA
<213>	Glycine max

atccattcca	caccaaaaag	taactccttt	cagtttcgga	gggaaacaca	acacaaaaag	60
ccccctcccc	ccaaagcaaa	tacacctttt	tttctttcag	ttattcaaaa	aatgttcgcc	120
gaagagaatg	gactcaaggg	agaccctaga	ctccaagcca	tttcccaagc	catcagagtc	180
gtccctcact	tcccataca	tggaataatg	tttcaagaca	taacgacatt	gttggttgat	240
cacaaggcgt	ttaaagacat	gtcgactttt	tgtcgatcgt	t		281

<210>	496
<211>	287
<212>	DNA
<213>	Glycine max

aaagctcaga cccaaacctt tcttttgctc ttcatccatt ccacaccaa aagtaacagt 60  
ttcagtttct gagggaaaca caacacaaaa agccccctcc ccccaaagca aatcaccttt 120

ttttctttca gttattcaaa aaatgttcgc cgaaggaatg gactcaaggg agaccctaga 180  
 ctccaagcca tttccaagc catcagagtc gtccctcact tccccatata tggaataatg 240  
 tttcaagaca taacgacatt gttgttgat cacaaggcgt ttaaaga 287

<210> 497  
 <211> 269  
 <212> DNA  
 <213> Glycine max  
 <400> 497

caaagctcag acccaaacct ttcttttgct cttcatccat tccacaccaa aaagtaacac 60  
 cttcagtttc ggagggaaac acaacacaaa aagccccctc ccccaaaagc aaatcacctt 120  
 tttttctttc agttattcaa aaaatgttcg ccgaagagaa tggactcaag ggagacccta 180  
 gactccaagc catttcccaa gccatcagag tcgtccctca cttcccata catggaataa 240  
 tgtttcaaga cataacgaca ttgttggtg 269

<210> 498  
 <211> 262  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(262)  
 <223> unsure at all n locations  
 <400> 498

caacaagaca cgcgcttagc gagaatcgcc tctgcaatcc gagtcatccc cgactttcct 60  
 aagccaggaa ttttgtttca ggacataacc acgctgcttc tnaacacaaa ggctttcaaa 120  
 gacaccattg acttgtttgt ngagaggtac agagatcaaa acatcaatgt tgtcgcagga 180  
 gttgaagcta gaggctttat atttggtcca cccattgcat tagctattgg agcaaaattt 240  
 gtcccatga ggaaacccaa ta 262

<210> 499  
 <211> 268  
 <212> DNA  
 <213> Glycine max  
 <400> 499

gctttctaaa ttctocacc ctcggttcca ctgcttcgtc gcaacacgtt acaataatgg 60

cttcgaagaa ttctcaacaa gacacgcgct tagcgagaat cgcctctgca atccgagtca 120  
 tccccgactt tcctaagcca ggaattttgt ttcaggacat aaccacgctg cttcttgata 180  
 caaaggcttt caaagacacc attgacttgt ttgttgagag gtacagagat caaaacatca 240  
 atgttgctgc aggagttgaa gctagagg 268

<210> 500  
 <211> 363  
 <212> DNA  
 <213> Glycine max

<400> 500

gaagtgaaga gaatgcgggt tgtttgttgt tccaattcag gcgtgagtgc tttccctagt 60  
 tgtcttagat tccctccact gatcgcaatt tcaacaacac cctcttcgat ccgctttcta 120  
 aattctccac cctccggttc cactgcttcg tcgcaacacg ttacaataat ggcttcgaag 180  
 aattctcaac aagacacgcg cttagcgaga atcgctctg caatccgagt catccccgac 240  
 tttcctaagc caggaatttt gtttcaggac ataaccacgc tgcttcttga taaaaaggct 300  
 ttcaaagaca ccattgactt gtttggtgag aggtacagag atcaaaacat caatgttgtc 360  
 gca 363

<210> 501  
 <211> 286  
 <212> DNA  
 <213> Glycine max

<400> 501

cccagattcc ctccactcat tgcaatttct tcgatccgct ttctaaattc cacacccctc 60  
 cgttccactg cttcgccgcg acaagttaca agaatggctt cgaagaatgc tcaacaagac 120  
 acgcgcttag ccagaatcgc ctctgcgacg cgagtcatcc ccgactttcc taagccagga 180  
 attttgtttc aggacataac cacgctgctt cttgatacaa aggctttcaa agacaccggt 240  
 gacttgtttg ttgagaggta cagagatcaa aacatcaatg ttgtcg 286

<210> 502  
 <211> 222  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1) ... (222)





<213> Glycine max  
 <400> 507  
 gcgggttggt tgttggtcca attcagggct gagggtttc cctagttgtc ttagattccc 60  
 tccactgata gcaatttcaa caacaccctc ttcatccgc tttctaaatt ctccaccct 120  
 ccgttccact gcttcgtcgc aacagttaca ataatggctt cgaagaattc tcaacaagac 180  
 acgcgcttag cgagaatcgc ctctgcaatc cgagtcattc ccgactttcc taagccagga 240  
 attttggttc aggacataac cacgctgctt c 271

<210> 508  
 <211> 228  
 <212> DNA  
 <213> Glycine max  
 <400> 508  
 gccactcttc catctttccc ttgtcccaga ttccctccac tcattgcaat ttcttcgata 60  
 cgctttctaa attccacacc cctccgttcc actgcttcgc cgcgacaagt tacaagaatg 120  
 gcttcgagaa tgctcaacaa gacacgcgct tagccagaat cgcctctgcg atccgagtca 180  
 tccccgactt tctaagcca ggaattttgt ttcaggacat aaccacgt 228

<210> 509  
 <211> 335  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(335)  
 <223> unsure at all n locations  
 <400> 509  
 ttctctctgt actcaaactc acttccccac ttatttatac aatgtcggct taaaagacc 60  
 aggatacccg tcttcatggc atcaaaacta agattcgtgt cgtccccaat ttcccaaat 120  
 ccggtattat gttccaagac attactactc tattgcttga tcccaaagca ttaaggaca 180  
 caatagattt gttcgttgag cgggtacaagg gcaaaaacat ttctgttggt gcaggattg 240  
 aagctcgagg ttttattttt ggtcctccca ttgcgctggc tataggagca aagtttgtag 300  
 catgaggana ccaaagaagt tgctggaaag ttatt 335

<210> 510





<221> unsure  
 <222> (1)...(281)  
 <223> unsure at all n locations

<400> 512

ctcttcttct tttcttgtnt ccttttccat tcttcttttt ctctctgtac tcaaactcac 60  
 ttccccactt atttatacaa tgtcggctta caaagaccag gatacccgtc ttcattggcat 120  
 caaaactaag attcgtgtcg tcccaatttc cccaaatccg gtattatggt ccaagacatt 180  
 actactctat tgcttgatcc caaagcattt aaggacacaa tagatttggt cgttgagcgg 240  
 tacaagggca aaaacatttc tgttggtgca ggaattgaag c 281

<210> 513  
 <211> 254  
 <212> DNA  
 <213> Glycine max

<400> 513

cttttattgc ttcttttccc attcttcatc ttcttctctc tgaaccgtac tcaaactcca 60  
 ctttcccact tatttataca atgtcggctt acaaagacca ggatccccgt cttcatggca 120  
 tcaaaactaa gattcgtgtc gtccccaatt tccccaaatc cggctttatg ttcctagaca 180  
 ttactactct attgcttgat cccaaagcat ttaaggactc aatagatttg ttcgtggagc 240  
 ggtacaaggg caaa 254

<210> 514  
 <211> 222  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(222)  
 <223> unsure at all n locations

<400> 514

ctcgancnnc ttogaagcng cttcttcttt tcttntttcc ttttncattc ttctttttct 60  
 ctctgtacan aaactcactt ccacacttat taatanataa tnngcttaca aagaccanga 120  
 taccggtctt natggcatca aaactaatat tcgtgtcgtc cccaatttcc ccaaattccg 180  
 tattatgttc caagacatta ctactctatt gcttgatccc aa 222

<210> 515



anctattact cnacancata tgcctctgac gnnccctgntn naagcgaacc cgtccttagct 240  
actnaacagn ttctctgggtc actccngcat atggaacgtg ntgggga 287

<210> 518  
<211> 261  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(261)  
<223> unsure at all n locations

<400> 518

canntctgnt cannaggcta caganagagc aattgacttc atgtatggnt ggttnatgga 60  
tccattaana tctggagact atnccnncag catgcganca cttgtgngga caagattacc 120  
anagtttntt gcagagcnat ccnaactacn tattgggttca ttngntntca ttagcctaaa 180  
ctattactct acaacatatg cctctgacgc acctgatcta agcgaagccg tcctagctac 240  
ttaacngatt ctcttgtcan t 261

<210> 519  
<211> 250  
<212> DNA  
<213> Glycine max

<400> 519

tgttcttatg tggttatgaa tgtgcttctt ttaggaaaag caaaagggaa ggattgggat 60  
cctcttggat tttgtttggt atgagcctct tacaagatca aaggctgaca attttgcagc 120  
tcaaagagcc agagactttc atattggatg gtaaaaatct tagcatttgt taactgagga 180  
tcctatattg caagtacaag tctttagtta tgaatgtgaa ttttcccctg caaagacttt 240  
cacacgcttg 250

<210> 520  
<211> 239  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(239)  
<223> unsure at all n locations

<400> 520  
aaacatggag cttccactcc tagcacatca ngcactcttt gcactaagct tttgcatctc 60  
aatTTTcttg gcacgtgtg atgatgattt tctatccgtg aaaaagaatt caagttcatc 120  
tccatttcct agcaactttc ttttnggaac tgcactcttct tcatatcagt ttgaaggagc 180  
ttacttgact gatggtaagg gactaaataa ctgggatgtt ttcactcata agccaggca 239

<210> 521  
<211> 251  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(251)  
<223> unsure at all n locations

<400> 521  
cttagagatg aagaatgtga tagacaagcc gtgaaaaggg cctnnggcttt tgTTgtagcc 60  
tggtccttag atcccttggt ttttggtgag taccctccng agatgcactc tattctcggg 120  
agtcagttgc caagattctc tcctgaggag aagagtctca taaaaggcag catagacttc 180  
attggcatca ataactatgg aactctctat gccaaaggact gctccctcac tgcttgtcct 240  
cttggaaacag a 251

<210> 522  
<211> 246  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(246)  
<223> unsure at all n locations

<400> 522  
aaaagattat gagcattatg ccantacntg cttcaaagct tttggagaca gagttaagca 60  
ctggattacc ttcaatgagc ctcataactt tgcactccat ggTTatgntt taggcattca 120  
agcacaggaa gatgttccct tttgggtcat cttctntgta agaaaggana atcatccact 180  
gagccataca ttgttgcctn taacattctc ttgtcacatg ctgctgccta tagaagctac 240  
caacta 246





<210> 528  
 <211> 280  
 <212> DNA  
 <213> Glycine max  
 <400> 528  
 caagtctcaa accatggcgt ttagaggagg cactatgttg atattaacaa tgatggcatt 60  
 acttgagatt cagatatgct catcggagat aaaccgtgga aactttccaa atggcttcgt 120  
 atttggcact gcctcttcag cttttcagta tgaaggggca gtgaaagaag acggaagggg 180  
 accctctgtg tgggacactt tttcacatac ttttggcaaa ataattgatt tcagcaatgc 240  
 tgatgttcgc gtggatcagt accaccgata cgaagaagat 280

<210> 529  
 <211> 259  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(259)  
 <223> unsure at all n locations  
 <400> 529  
 cttaaaaacca tttgtcacgc tgttacattg ggacctccca caagctcttg aagatgaata 60  
 tanggggatt tctcaaacct gaaatagtgt aaataaatac tcaattatat atgattcact 120  
 atagtatttt taaataatga aaaagaaaat atagtaaag tttatggaaa aataaaaata 180  
 gggaggactt ccgtaactat gctgactttt gcttcaagac atttggatgat cgggtgaagc 240  
 actgggtaac cctaaatga 259

<210> 530  
 <211> 259  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(259)  
 <223> unsure at all n locations  
 <400> 530  
 gggtttgcac ganaccacaa ggataaacta ttacaaaggc tatttgactc aactaaagaa 60  
 agcagttgat gatggagcaa atgtgggttg ggaatttgca tggtcantgc ngggataaac 120

ttgaatggaa ggttgggggtt acacatcaaa ggtttggcat gtctatgttg atttcaaaac 180  
 cctcaaggag atacccccaa gatgtcggca tactggttca agcaaaactcc attaccaaaa 240  
 aggagtatta atagcnggg 259

<210> 531  
 <211> 256  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(256)  
 <223> unsure at all n locations  
 <400> 531

caaccacatg tcacactaca caactgtgat cttccgcagg cacttgagga tgaatatgga 60  
 ggatggggtta gtcgtgatat cataaganac ttcacaaact atgcagatgt gtgttttaga 120  
 gagtttggtg atagantcca gtactggact actgtnaatg ancccaatgc ctttgccctg 180  
 ggtggctatg atcaaggaac ctcccctcct cagcgatgtt ctccccatt ttgcactaca 240  
 aacagcacta ggggca 256

<210> 532  
 <211> 272  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(272)  
 <223> unsure at all n locations  
 <400> 532

ggcattaagc agaatcataa tctttcatca catgcatcat atggcgcttc tacttgtcgc 60  
 tctcttggct cttgttacta cattaccatc ggttactgtt ggagaagtgc tttcacccat 120  
 tctcgacgtt gcttactga accgaaccag ttttcccaag ggctttangc nggggcagga 180  
 tccgcacgt atcagtagga aggtggggca aacgaagtgg caaaggacca agtatatggg 240  
 atacctacca caaatatcca gataaaattg tg 272

<210> 533  
 <211> 240  
 <212> DNA







gcaaaagggga aggattggggg atcctcttggg attttggttg gtatgagcct cttacaagat 360  
 caaangcccg ncaatttanc acttaaanaa ncccanacct ttatgttnga ngggtcaatc 420  
 attccccctg gttatgngag ggttccacca nccenttta 459

<210> 538  
 <211> 472  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(472)  
 <223> unsure at all n locations

<400> 538

cgacggccga cgcgtacgcc cacgcgtccg agaagtttct gttgatcant accatcgcta 60  
 caaagaagat atngnncngg nggccagctn gaanggggat gcctaccggg tctcaatctc 120  
 gtggtccaga atttttccaa atggaactgg ccaantaaan tggaaagggtg tagcatacta 180  
 caataggntg atcaattact tgctagaaaa aggtattact ccatatgcaa atctctacca 240  
 ttatgatctt ctttancact tgaagagagg tacaacggat tattganccg gcaagntgtg 300  
 aatgatttng caanattatg cagaatttng ntttnaagan ttntngaaga tagaattaaa 360  
 aantngantg acgttnaaaa gaancctnaa gnaggnagnt tgnecatggcn aagaaaaang 420  
 ggattntatn ncccccgga aaannnttaa aaagaatntn ggnaatagnc aa 472

<210> 539  
 <211> 443  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(443)  
 <223> unsure at all n locations

<400> 539

ggcttttaciaa cgtaccatgg ggcatgtaca aatcattgat gtacataaag gaacgttatg 60  
 gaaacccaac tgtgntcnta tccgaaaatg gtaacattat atatcaattt cttgcttttt 120  
 ccttttttttg gcttggtgat tctgttgttt caatgtcatg tgacatattt tatgacatgt 180  
 aggcatggat gatccgggta acgtgactct tccaagggt ttgcatgaca ccacaaggat 240  
 aaactattac aaaggctatt tgactcaact aaagaaggca gttgatgatg gagctaattg 300

ggttggatac tttgcatggg cattgctgga taactttgaa tggaggttgg gttacacatc 360  
aaggnttggc attgnctatg ttgatttcaa aaccctcaag agatacccta agatgtcagc 420  
atactgggtc aagcaactca ttg 443

<210> 540  
<211> 253  
<212> DNA  
<213> Glycine max

<400> 540

gctaagtggg ttggatactt tgcattggca ttgctggata actttgaatg gaggttgggt 60  
tacacatcaa ggtttggcat tgtctatggt gatttcaaaa ccctcaagag ataccctaag 120  
atgtcagcat actggttcaa gcaactcatt gccaaaaaga agtactaata gctgggctga 180  
acatctactt tctaagcttc tagttgcttc agataatcat gttttagtgg ttttggttga 240  
gttaaaaagta gtt 253

<210> 541  
<211> 249  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(249)  
<223> unsure at all n locations

<400> 541

ctaattnggt tggatacttt gcntgggttca ttgctggata actttgaatg gaggttgggt 60  
nacacatcan ggtttggcat tgtctatgtn gattncaaaa ccctcangan atancctaag 120  
atgncagcat actggntcan gcaactcatt gccannnagn agtactaata gctgggctga 180  
acatctactt tctaagcttc tagttgcata agataatcat gttttagtgg ttttggttga 240  
gttaaaaagc 249

<210> 542  
<211> 248  
<212> DNA  
<213> Glycine max

<400> 542

ttttttttgc cataaaagat cattttattc taagacttgc attaatcaag tcacatgatt 60

acagttacag aactactttt aactcaacca aaaccactaa aacatgatta tctgaagcaa 120  
 ctagaagctt agaaagtaga tgttcagccc agctattagt acttcttttt ggcaatgagt 180  
 tgcttgaacc agtatgctga catcttaggg tatctcttga gggttttgaa atcaacatag 240  
 acaatgcc 248

<210> 543  
 <211> 249  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(249)  
 <223> unsure at all n locations

<400> 543

ggagttcttg agagaaaacg gcgacaacga nagccgttcc gtctcgcgga gtgacttccc 60  
 tcccaacttc atcttcggag ttgccacttc tgcataatcag atagaagggtg cttgtaagga 120  
 ggggtggtaga ggtcctagca tatgggatgc ctttacacac acggnaggaa aaattcttga 180  
 caaaagcaat ggtgatgttg cagttaatca ttatcatcgg tacatggnag atattgatct 240  
 natagccna 249

<210> 544  
 <211> 252  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(252)  
 <223> unsure at all n locations

<400> 544

ggagttcttg agagaaaacg gcgacaacga aaaccgttcc gtctcgcgga gtgacttccc 60  
 tcccaacttc atcttcggag ttgccacttc tgcataatcag atagaagggtg cttgtaagga 120  
 ggggtggtaga ggtcctagca tatgggatgc ctttacacac acggaaggaa aaattcttga 180  
 caaaagcaat ggtgatgttg cagttaatca ttatcatcgg tacatggnag atattgatct 240  
 atagccaagt tg 252

<210> 545



tgggagcttt tagtcataca cca

263

<210> 548  
<211> 477  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(477)  
<223> unsure at all n locations

<400> 548

ggaaggattg ggatcctctt ggattttggt tggatgagc ctcttacaag atcaaaggcc 60  
gacaatttag cagctcaaag agccagagac tttcatgttg gatggttcat tcatccccctt 120  
gtttatggag agtntccaac aaccattcaa aatattgttg ggaatagact ccccaaattc 180  
actagtgaag aagttaaaat cgtgaaaggg ttcaatagat tttgttgga tnanccantt 240  
tcntacgnct cnngtttgac cntttaaggg aaaacttaaa ncccangttt ttaangggct 300  
tggaatcccg aattggtntt ccaanaacgg ggtgnccatt tgnccaagg ntttttttta 360  
ttgggtttta acgnnccctg ggggggtgtt caaaaaattg gtgggcntaa aaggggaccct 420  
tttgggaaac ccccgngng gttnttccca aaaggggnng ggtnanacc ggnaanc 477

<210> 549  
<211> 402  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(402)  
<223> unsure at all n locations

<400> 549

ggatgacgtt taacgaacct cgtgtggtgg ctgctcttgg ctatgataat ggtttctttg 60  
cccctggaag atgctcaaaa gaatatggga attgtactgc tggcaactca ggcactgagc 120  
cttacattgt tgcccacaat ttgatattgt cgcatgcagc anctgttcaa agataccgag 180  
cgaagtacca agaaaagcaa aagggaagga ttgggatcct cttggatttt gtttggtatg 240  
agcctcttac aagatcaaag gctgacaatt ttgcagctca aagagccaga gactttcata 300  
ttggatgggt cattcatccc cttgtttatg gagagtatcc aaaaaccatt caaaatattg 360

ttgggaatan actccccaaa ntcaactantt aagaanttta aa 402

<210> 550  
<211> 473  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(473)  
<223> unsure at all n locations

<400> 550

gtttaatgaa cctcgtgtgg tggctgctct tggctatgat aatgggtttct ttgccccngg 60  
aagatgctca aaagaatatg ggaattgtac agctggcaac tcaggcactg agcettacat 120  
tgttgccac aatttgatat tgtcacatgc agctgctggt caaagatacc gagagaagta 180  
tcaagaaaag caaaaaggaa ggattgggat cctcttggat tttgtttggt atgagcctct 240  
tacaagatca aaggccgaca atttagcagc tcaaagagcc agagactttc atgttggatg 300  
gttcattcat ccccttggtt atggagagta tccaacaacc attcaaaata ttggtgggaa 360  
tagactcccc aaattcacta gtgaaagaaa gttaaaatcc gtgaaagggg tcaatagaat 420  
tttggtnnga atcaanccat nttcttcgtc tacatgnatt aaacctatta aac 473

<210> 551  
<211> 276  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(276)  
<223> unsure at all n locations

<400> 551

ctcaggcact gagcettaca ttgttgccca caatttgata ttntcgcagt cagcagctgt 60  
tcaaagatac cgagcgaagt accaagaaaa gcaaaaggga aggattggga tcctcttgga 120  
ttttgtttgg tatgagcctc ttacaagatc aaaggctgac aattttgcag ctcaaagagc 180  
cagagacttt catattggat ggttcattca tccccttggt tatggagagt atccaaaaac 240  
cattcaaaat attgttggga atagactccc caaatt 276

<210> 552  
<211> 251



<212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(251)  
 <223> unsure at all n locations  
  
 <400> 552  
  
 gtttaacgaa cctcgtgtgg tggctgctct tggctatgat aatggtttct ttgccccctgg 60  
 aagatgctca aaagantatg ggaattgtac tgctggcaac tcaggcactg agccttacat 120  
 tgttgcccac aatttgatat tgtcgcacgc agcagctggt caaagatacc gagcgaagta 180  
 ccaaganaag caaaaggga ggaattggat cctctgtaaa ttgttttgg atgagcctct 240  
 tacaagatca a 251

<210> 553  
 <211> 261  
 <212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(261)  
 <223> unsure at all n locations  
  
 <400> 553  
  
 acggattatt gngtcgcaa gttgtgaaag attttgcaga ttatgcagaa ttttgtttca 60  
 agacttttgg agatagagtt aagaattgga tgacgtttta cgaacctcgt gtggtggctg 120  
 ctcttggtta tgataatggt ttctttgccc ctggaagatg ctcaaaagaa tatgggaatt 180  
 gtactgctgg caactcaggc actgagcctt acattgttgc ccacaattga tattgtcgca 240  
 tgcagcagct gttcaaagat a 261

<210> 554  
 <211> 259  
 <212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(259)  
 <223> unsure at all n locations  
  
 <400> 554  
  
 cgaaaagcaa aagggaagga ttggnatcct cttggatttt ntttggatat agcctcttac 60

aagatcaaag gctgacaatt ttgcagctcc aaagagccca gagactttca tattggatgg 120  
 ttcattcatc cccttggtta tggagagtat ccaaaaacca ttcaaaatat tgttggaat 180  
 agactcccca aattcactag tgaagaagtt aaaatcgtga agggttcgat tgattttgtt 240  
 ggaatcaacc agtatacta 259

<210> 555  
 <211> 232  
 <212> DNA  
 <213> Glycine max  
 <400> 555

gagagaagta tcaagaaaag caaaagggaa ggattgggat cctcttggat tttgtttggt 60  
 atgagcctct tacaagatca aaggccgaca atttagcagc tcaaagagcc agagactttc 120  
 atgttggatg gttcattcat cccttggtt atggagagta tccaacaacc attcaaaata 180  
 ttgttgggaa tagactcccc aaattcacta gtgaagaagt taaaatcgtg ag 232

<210> 556  
 <211> 265  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(265)  
 <223> unsure at all n locations  
 <400> 556

tttaacgaac ctctgtgtgt ggctgctctt ggctatgata atggtttctt tgcccctgga 60  
 agatgctcaa angaatatgg gaattgtact gctggcaact caggcactga gccttacatt 120  
 gttgccaca atttgatatt gtccatgcag cagctgttca aagataccga gcgaagtacc 180  
 aagaaaagca aaagggaagg attgggatcc tcttgattt gtttggtatg agcctcttac 240  
 aagatcaaag gctgacaatt tgcag 265

<210> 557  
 <211> 256  
 <212> DNA  
 <213> Glycine max  
 <400> 557

tagagttaag aattggatga cgtttaacga acctcgtgtg gtggctgctc ttggctatga 60

taatgggtttc tttgcccctg gaagatgctc aaaagaatat ggggaattgta ctgctggcaa 120  
ctcaggcact gagccttaca ttgttgccca caatttgata ttgtcgcatg cagcagctgt 180  
tcaaagatac cgagcgaagt accaagaaaa gcaaaagga aggattggga tcctcttgga 240  
ttttgtttgg tatgag 256

<210> 558  
<211> 443  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(443)  
<223> unsure at all n locations  
<400> 558

aagacgacag aagggggact ggaatgcagg atttgcttat gcaaagaatg gagtgcctat 60  
tggtcctaga gctaattctt attggcttta caatgtacca tggggcatgt acaaatcatt 120  
gatatacata aaggaacgtt atggaaaccc aactgttatc ttatctgaaa atggcatgga 180  
tgatccgggt aatgtgactc ttcccaaggg tttgcatgac accacaagga taaactatta 240  
caaaggctat ttgactcaac taaagaaagc agttgatgat ggagcanatg tggttgggta 300  
ctttgcatgg tcattgctgg ataactttga atggagggtg gggttacacat caaggtttgg 360  
cattgtctat gttgatttca aaaccctca aganataccc naaagatntn tgggaannng 420  
gggtncancc aatgncntta cca 443

<210> 559  
<211> 397  
<212> DNA  
<213> Glycine max  
<400> 559

aagacgacag aagggtatga tcctcatcaa tcaaaaccta aagtcacagg ctatcaaattg 60  
gactggaatg caggatttgc ttatgcaaag aatggagtgc ctattggtcc tagagctaatt 120  
tcttattggc ttacaattgt accatggggc atgtacaaat cattgatata cataaaggaa 180  
cgttatggaa acccaactgt tatcttatct gaaaatggca tggatgatcc gggtaattgtg 240  
actcttccca agggtttgca tgacaccaca aggataaact attacaaagg ctatttgact 300  
caactaaaga aagcagttga tgatggagca aatgtgggtg ggtactttgc atggtcattg 360

ctggataact ttgaatggaa gtttgggtta cacatca

397

<210> 560  
<211> 505  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(505)  
<223> unsure at all n locations

<400> 560

ccgaatttcc ggcncgaccc acgcgtccgc ccacgcgtgc gcgctttctt taaccattan 60  
gcgtttaaaa tantttctat acngtnnggt aacggggntc tttnggntcg gnttatntga 120  
acattgaana tncaaagaac ggagtgccta ttggtccaan ggcttattct tattggntnt 180  
acaacgtacc atggggcatg tncaaancat tgatgtacat aaaggaacgt tatggaaacc 240  
caactgagat cttatccgaa aatggcatgg atgatccggg taacngnact cttaccaagg 300  
gttttgcaat gacaccacaa ggatnaacta ttacaaaagc tattntgact caactaacga 360  
aggcaattna mnattgagct aatgttnngt ggatactttg catcgggtcan tgcttgata 420  
aacttttgaa tngaannntg ggttaccnnt naanggttg gcattaggct atgtttgatt 480  
tcaaaacctt natnanaacc cctaa 505

<210> 561  
<211> 247  
<212> DNA  
<213> Glycine max

<400> 561

ggctatcaaa tggactggaa tgcaggattt gcttatgcaa agaatggagt gcctattggt 60  
cctagagcta attcttattg gctttacaat gtaccatggg gcatgtacaa atcattgata 120  
tacataaagg aacgttatgg aaaccaact gttattttat ctgaaaatgg catggatgat 180  
ccgggtaatg tgactcttcc caagggttg catgacacca caaggataaa ctattacaaa 240  
ggctatt 247

<210> 562  
<211> 250  
<212> DNA  
<213> Glycine max

<400> 562  
aggctatcaa atggactgga atgcaggatt tgcttatgca aagaatggag tgcctattgg 60  
tcctagagct aattcttatt ggctttacaa tgtaccatgg ggcatgtaca aatcattgat 120  
atacataaag gaacgttatg gaaacccaac tgttatttta tctgaaaatg gcatggatga 180  
tccgggtaat gtgactcttc ccaagggttt gcatgacacc acaaggataa actattacaa 240  
aggctatttg 250

<210> 563  
<211> 451  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(451)  
<223> unsure at all n locations

<400> 563  
cgctttcttt aaccattatt gattaaaata ttttctatac atttccataa ctntctcttt 60  
tggtttgggt tatatgaaca ttgaagatgc aaagaacgga gtgcctattg gtccaagggc 120  
ttattcttat tggctttaca acgtaccatg gggcatgtac aaatcattga tgtacataaa 180  
ggaacgttat ggaaacccaa ctgtgttctt atccgaaaat ggcattgatg atccgggtaa 240  
cgtgactctt nccaagggtt tgcattgacac cacaaggata aactattaca aaggctattt 300  
gactcaacta aagaaggcag ttgatgatgg agctaattgtg gttggatact ttgcattgca 360  
ttgntggata actttgaatg ganggtgggt tacacatnaa aggnttggca ttggctatgg 420  
tgattcnaaa accctaagag aatnccttag a 451

<210> 564  
<211> 394  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(394)  
<223> unsure at all n locations

<400> 564  
ttatatgaac nttgaagatg caaacaacgg aaagcctatt ggtccaaang cttattctta 60

ttngcnttac aacgtaccat ngggcatgtc aaatcattga tgcacataaa ngaacnntat 120  
 ggaaacccaa ctgcgttctt atccccaaat ggcattggatn atcccgntaa ccntnactnt 180  
 tcccaanggt ttgcatnaca ccacaaggat naactattan naaagctatt tgactcaact 240  
 aaanaaagca nttgatgatn gancntaatg nngttngaaa cctttncatg gncanttgn 300  
 tgganaactt taaanngagn ttgggttccc catcaagntt tggcaattnn ccatttntta 360  
 atttnaaaan cccttnanaa naaancctt aaaa 394

<210> 565  
 <211> 232  
 <212> DNA  
 <213> Glycine max

<400> 565

aatcaaccaa tatactacgt actacatgta tgatcctcat caagcaaac ctaaagtccc 60  
 aggctatcaa atggactgga atgcaggatt tgcttatgca aagaacggag tgcctattgg 120  
 tccaagggtt tattcttatt ggctttacaa cgtaccatgg ggcattgtaca aatcattgat 180  
 gtacataaag gaacgttatg gaaacccaac tgtgttctta tccgaaaatg gc 232

<210> 566  
 <211> 267  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(267)  
 <223> unsure at all n locations

<400> 566

aaccattcaa aatattgttg ggantagact ccccaaattc actagtgaag nagttaaaat 60  
 cgtgaagggt tgcattgatt ttgttgaat caaccagtat actacgttct tcatttatga 120  
 tctcatcaa tcaaaaccta aagtcccagg ctatcaaattg gactggaatg caggatttgc 180  
 ttatgcanag aatggagtgc ctattggtcc tagagctaatt tcttattggc ttacaaatgt 240  
 accatggggc atgtacaaat cattgat 267

<210> 567  
 <211> 257  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(257)  
 <223> unsure at all n locations

<400> 567

gggaatagac tccccaaatt cactagtga gaagttaaaa tcgtgaaggg ttcgattgat 60  
 tttgttgga tcaaccagta tactacgttc tntcatttat gatcctcatc aatcaaaacc 120  
 taaagtccca ggctatcaaa tggactggaa tgcaggattt gcttatgcaa agaattggagt 180  
 gcctantggg cctagagcta attottattg gctttacaat gtaccatggg gcatgtacaa 240  
 atcattgnta tncataa 257

<210> 568  
 <211> 281  
 <212> DNA  
 <213> Glycine max

<400> 568

gaagaagtta aaatcgtga gggttcaata gattttgttg gaatcaacca atatactacg 60  
 tactacatgt atgatcctca tcaagcaaaa cctaaagtcc caggctatca aatggactgg 120  
 aatgcaggat ttgcttatgc aaagaacgga gtgcctattg gtccaagggc ttattcttat 180  
 tggctttaca acgtaccatg gggcatgtac aaatcattga tgtacataaa ggaacgttat 240  
 ggaaacccaa ctgtgttctt atccgaaaat ggcattggatg a 281

<210> 569  
 <211> 145  
 <212> DNA  
 <213> Glycine max

<400> 569

caaagaacgg agtgcctatt ggtccaaggg cttattotta ttggctttac aacgtaccat 60  
 ggggcatgta caaatcattg atgtacataa aggaacgtta tggaaaccca actgtgttct 120  
 tatccgaaaa tggcatggat gatcc 145

<210> 570  
 <211> 402  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure

<222> (1)...(402)  
<223> unsure at all n locations

<400> 570

aagacgacag aagggcagtg tacattaccg aaaatggcgt tgcggaatca aagaatgact 60  
cacttgcaat caatgaagcc cgaaaggatg gtattcgaat tagataccat gatggccatc 120  
tcaaatccct gcttcatgcy atcaaagata gagttaatgt gaagggtac tatatatggt 180  
cattttcang atagctttga atgggatgct gggtacacag ctcgatttgg catcatatat 240  
gtggannaca agaacaattt gagtagatac cctaagtcct ctgcgttttg gctgaaaaca 300  
atgctgttac tgcgtttgcc aaatcaacat gatctentat agggtaaann antnngtnen 360  
ncanngnncn nngnaannag cggggggctc tanaaggatt ca 402

<210> 571  
<211> 268  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(268)  
<223> unsure at all n locations

<400> 571

gtcaccatag tgactttctt ctttgaacca aaatctaata gtgatgctga tcncaaggca 60  
gcaaggcgag ctctggactt tatgtttggc tggtttgcta atcccattac atttggtgac 120  
tactctgaga gtatgagatc tttagtgtgt tctagactcc ccacattcac caaagctcaa 180  
tctgaaagtc tcaaagggtc atatgatttt cttggtataa attcattaca cctcaaattt 240  
cgtggaatat gctccaccaa ccaccatt 268

<210> 572  
<211> 258  
<212> DNA  
<213> Glycine max

<400> 572

gttggtataa attattacac ctcaaatttc gtggaatatg ctccaccaac caccactaac 60  
aagacctatt ttcattgata tgctagccaa actttcttcg accaggaatg gtgtacccat 120  
tggtcacaccg actcctctga gctggctctt tatctatccg gaggggaattt ataagctcat 180  
gacatacata agggacaact acaataatcc accagtgtac attaccgaaa atggcgttgc 240



ggaatcaaag aatgactc 258

<210> 573  
<211> 185  
<212> DNA  
<213> Glycine max

<400> 573

caccagtgtg cattaccgaa aatggcggtg cggaatcaaa gaatgactca cttgcaatca 60

atgaagcccg aaaggatggt attcgaatta gataccatga tgggccatct caaatccctg 120

cttcatgcga tcaaagatag agttaatgtg aagggctact atatatggtc attttcagat 180

agctt 185

<210> 574  
<211> 163  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(163)  
<223> unsure at all n locations

<400> 574

ctaagggaca actacaataa tccaccagtg tacattaccg aaaatggcgt tgcggaatca 60

aagaatgact cacttgcaat caatgaagcc cgaaaggatg gtattcgaat tagataccat 120

gatggccatc tcaaatccct gcttcatgga tcanagatag agt 163

<210> 575  
<211> 329  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(329)  
<223> unsure at all n locations

<400> 575

agcaatgaaa gcaataagtc cctccttctt ctgccttata attcttgtga cccttttngc 60

tggttagcatt gaaagtgcac cagcaaactg gaagccaagc cattatgctg cacccttcaa 120

taggagtgtt tttcttctgg ttttctatct ggaataggct ctgcagctta ccagatagaa 180

ggagcagcag ctatagatgg cagaggacca agtatatggg acacctatac taaacagcaa 240  
ccaggggaaga tttgggatca tagtgatgga agtctagcaa ttgattttta tcaccggtac 300  
aagagcgaca taaagatggt gaaagaagt 329

<210> 576  
<211> 290  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(290)  
<223> unsure at all n locations  
<400> 576

gncaataagt cctccttcc nctgccttat aattnttgtg acccttttgg ctggtagcat 60  
tgaaagtgca ccagcaaacg tgaagccaag ccattatgct gcacccttca ataggagtgt 120  
tttctcttct ggttttctat ttggaatagg ctctgcagct taccagatag aaggagcagc 180  
agctatagat ggcagaggac caagtatatg ggacacctat actaaacagc aaccagggaa 240  
gatttgggat catagtgatg gaagtctagc aattgatttt taccaccggt 290

<210> 577  
<211> 283  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(283)  
<223> unsure at all n locations  
<400> 577

gtccctcctt cctctgcctt ataattcttg tgaccctttt ngctggtagc attgaaagtg 60  
caccagcaaa cgtgaagcca agccattatg ctgcaccctt caataggagt gtttttcctt 120  
ctggttttct atttggaata ggctctgcag cttaccagat agaaggagca gcagctatag 180  
atggcagang accaagtata tgggacacct atactaaaca gcaaccaggg aagatttggg 240  
atcatagtga tggaagtcta gcaattgatt nttatcacgg gta 283

<210> 578  
<211> 284  
<212> DNA  
<213> Glycine max



ctgggttttct atttgaata ggctctgcag cttaccagat agaaggagca gcagctatag 180  
atggcagagg accaagtata tgggacacct atactaaaca gcaacc 226

<210> 581  
<211> 258  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(258)  
<223> unsure at all n locations

<400> 581

gcaatgaaag caataagtcc ctccttcctc tgccttataa ttcttgtgac ccttttngct 60  
ggtagcattg aaagtgcacc agcaaacgtg aagccaagcc attatgctgc acccttcaat 120  
aggagtgttt ttccttctgg ttttctattt ggaataggct ctgcagctta ccagatagaa 180  
ggagcagcag ctatagatgg cagaggacca ngtnatggg acacctatac taaaacagca 240  
accagggaag atttgga 258

<210> 582  
<211> 255  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(255)  
<223> unsure at all n locations

<400> 582

ataagtcctt ccttcctctg ccttataatt cttgtgacct ttttngctgg tagcattgaa 60  
agtgcaccag caaacgtgaa gccaaagccat tatgctgcac ccttcaatag gagggttttt 120  
ccttctgggtt ttctatttgg aataggctct gcagcttacc agatagaagg agcagcagct 180  
atagatggca gaggaccaag tatatgggac actatactaa acagcaacca gggaagattt 240  
gggatcatag tgatg 255

<210> 583  
<211> 266  
<212> DNA  
<213> Glycine max

atgaaagcna	taagtccttc	cttcctctgc	cttataattc	ttgtgaccct	tttngctggt	60
agcattgaaa	gtgcaccagc	aaacgtgaag	ccaagccatt	atgctgcacc	cttcaatagg	120
agtgtttttc	cttctgtttt	ctatttggaa	taggctctgc	agcttaccag	atagaaggag	180
cngcagctat	agatggcaga	ggaccaagta	tatgggacac	ctatactaaa	cagcaaccag	240
ggaagatttg	ggatcatagt	gatgga				266

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<220>
<221>      unsure
<222>      (1)...(275)
<223>      unsure at all n locations
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taagtctntc	cttcctctgc	cttatanttc	ttgtgancct	ttngtaggt	agcattgaaa	60
gtgcaccagc	aaacgtgaag	ccaagccatt	atgctgcacc	cttcaatagg	agtgtttttc	120
cttctgggtt	tctatntggn	ntaggtcttg	cagcttacca	gatagaaggn	gcagcagcta	180
tagatggcag	angaccaagt	atntgggaca	ccgatactna	acagnaacag	ggncnattgg	240
gatcatnqtg	atggagncna	gncaattgat	tntnt			275

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<220>
<221>      unsure
<222>      (1)...(223)
<223>      unsure at all n locations
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gtccctcctt cctctgcctt ataattcttg tanncc tant ngctggtagc attgaaagtg 60  
caccangcaa acgtgaagcc aagccattat gctgcaccct tcaataggag tgtttttcct 120

tctggttttc tatttgaat aggctctgca gcttaccaga tagaagaggc agcagctata 180  
 gatggcagag gnccaagtat atgggacacc ttatactaaa cag 223

<210> 586  
 <211> 239  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(239)  
 <223> unsure at all n locations

<400> 586

gcaatgaaag caataagtcc ctccttcctc tgccttataa ttcttgtgac ccttttngct 60  
 ggtagcattg aaagtgcacc agcaaacgtg aagccaagcc attatgctgc acccttcaat 120  
 aggagtgttt ttcctctggt tttctatttg gaataggctc tgcagcttac cagatagaag 180  
 gagcagcagc tatagatggc agagggacca agtatatggg acacctatac taaacagca 239

<210> 587  
 <211> 279  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(279)  
 <223> unsure at all n locations

<400> 587

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 ccaagctagt gaatgcatca tttgatttta ttggettaaa ctattactcc tctggttata 120  
 ttaatggtgt cctccaagc aacgacaaac ccaattttct aacagattct cgcaccaaca 180  
 cttcatttga acgcaatgga agaccctag gtctaagggc cgcttcagtt tggatatact 240  
 tttatccaag gggacttcta gatcttctgt tatatacca 279

<210> 588  
 <211> 258  
 <212> DNA  
 <213> Glycine max

<400> 588

ctaaaaacat gcgagccctg gtgggaagta gattgcctaa gttcaccaaa tggcaagcca 60

agctagtga tggatcattt gattttattg gcttaaacta ttactcctct ggttatatta 120  
atggtgtccc tccaagcaac gacaaaccca attttctaac agattctcgc accaactt 180  
catttgaacg caatggaaga cccctaggtc taagggccgc ttcagtttgg atatactttt 240  
atccaagggg acttctag 258

<210> 589  
<211> 278  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(278)  
<223> unsure at all n locations  
<400> 589

gnntgggaac cattaacaaa aggagagtat cctaaaaaca tgcgagccct ggtgggaagt 60  
agattgccta agttcaccaa atgggcaagc cnagctagtg aatggatcat ttgattttat 120  
tggcttaaac tattactcct ctggttatat taatggtgtc cctccaagca acgacaaacc 180  
caattttcta acagattctc gcaccaacac ttcatttgaa cgcnatggaa gaccctagg 240  
tctaagggcc gttcagttt ggatatactt ttatocaa 278

<210> 590  
<211> 266  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(266)  
<223> unsure at all n locations  
<400> 590

ataatatggc atttaaaggc tatttcgttt tggggcctca tagctcttgt tgtcgttggc 60  
acttccaaag ttacatgcga aatagaagca gataaagttt cacctattat tgacttttcc 120  
ctcaatcgga acagtttccc tgaaggcttc atctttgggg cggcatcatn cctcctacca 180  
gttcgaaggt gcagcanagg aaggtggttag aggaccaagt gtatgggata cttcacccat 240  
aaatntccag ataagatcaa ggatgg 266

<210> 591

<211> 281  
 <212> DNA  
 <213> Glycine max

<400> 591

gatccttgaa tagatcacat aacatgggca tcattgggca tgcaacacgt ttattgttag 60  
 cagcacgtta agatcagttg ttactcgtgc ggaaccacct aaacctgggc ctcttttcga 120  
 tcttagttca ttcaatcgcc acagctttcc ggcaggcttc actttcgggg catcatcttc 180  
 cgcgtaggag tttgaagggtg cggcaaaaga atatggtaga ggaccaagta tatgggatac 240  
 tttcatcaat caacatccag taagatagca gatggaacga a 281

<210> 592  
 <211> 429  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(429)  
 <223> unsure at all n locations

<400> 592

ccangattan tgccattttg tgggttggtt atcccgggca agctggggga actgccattg 60  
 ctgatgtant cnttgggtaca actaaccag gangaagggtt acccatgaca tggtagccac 120  
 aaggttactt ggccaaagtg cccatgacaa acatggacat gcgtccaaac ccaacaacan 180  
 ggtacccaag aagaacctat agattctaca aangtcctgt antgttccca ttcggacatg 240  
 gcctaagtta ctcaanattc anccacagct tancacttgc ccccaaacag gtctcagtgc 300  
 ccataatgag cctccaagcc ttgacaaact caaccctctc aagcaaagca nttaangtga 360  
 gccatgccaa ttctgatgac tcattggaga tgganttcca cgttgatgtn aaaaaccaan 420  
 gctcaatgg 429

<210> 593  
 <211> 281  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(281)  
 <223> unsure at all n locations

<400> 593



caaaatacat cataagatat ggcattcgac gcttatttcc ttttgggcct catagctctt 60  
 gttcttgtta gcacttccaa agttacatgc gncntagaag cagatacagt ttcacctgtt 120  
 attgacattt cactcaaccg gaacagnntc cagaaggggt catctttggg gcgggatctt 180  
 cctcgtacca gttcgaaggt gcagcaaag atggtggttag aggaccaagc gtatgggata 240  
 ccttcacca taattatcct ggtaagatca ttgatagaac a 281

<210> 594  
 <211> 271  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(271)  
 <223> unsure at all n locations

<400> 594  
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 acttccaaag ttanatgcgn antagaagca gatacagttt cacctgttat tgacatttca 120  
 ctcaaccgga acagnntcca gaaggggttca tctttggggc gggatcttcc tcgtaccagt 180  
 tcgaagggtgc agcaaagat ggtggttagag gaccaagcgt atgggatacc ttcaccata 240  
 attatcctgg taagatcatt gatagaagca a 271

<210> 595  
 <211> 253  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(253)  
 <223> unsure at all n locations

<400> 595  
 aaaaacatat cacacaatat ggcattcaag ggctatttcc ttctcggcct cgttactctt 60  
 gttcttgtta aatcttccaa agttacatgc gaancnagaa tcgggttaata cagtttcacc 120  
 cattattgac atttactca atcgggaagag nttcccagaa ggggttcatat ttggggcggg 180  
 atcttcctcg taccagttcg aaggggcagc aaaggaaggt ggtagaggac caagtgtatg 240  
 ggataccttc acc 253

<210> 596  
 <211> 284  
 <212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(284)  
 <223> unsure at all n locations  
  
 <400> 596  
  
 gaaaaacata tcacacaata tgggnattcaa gggntatttc cttctgcggc ntcgttactc 60  
 ttgttcttng ntaaattcttc caaagttaca tgccgaancc gaatcagtta atacagtttc 120  
 acccattatt gacatttgca ctcaatcgga agagnnttcc cagaaggggt catatttggg 180  
 gcgggatctt ccgcgtacca gttcgaaggg gcagcaaagg aaggtggtag aggaccaagt 240  
 gtatgggata ccttgcaccc ataattatcc aggaaagatc atgg 284

<210> 597  
 <211> 378  
 <212> DNA  
 <213> Glycine max  
  
 <400> 597  
  
 gtaagaaagg aaaatcatcc actgagccat acattgttgc tcataacatt ctcttgtcac 60  
 atgctgctgc ctatagaagc taccaactac atttcaagga acaacaagga ggtcaaatag 120  
 gaatagcact agatgtcatt tggatatgaac ctataacaga acttgatgaa gacaaagacg 180  
 cagcagcaag agctatggac ttttcacttg gatggttcct tgaccactt ttctttggaa 240  
 aatatacctt ctcaatggag aaacttgtag ctaagagatt gccggagatt tctgatacag 300  
 cctcaaaatt tcttgtggga tctttggatt ttattggcat aaatcactac acctcagtct 360  
 atactcgtaa cgacagga 378

<210> 598  
 <211> 251  
 <212> DNA  
 <213> Glycine max  
  
 <400> 598  
  
 accaactaca tttcaaggaa caacaaggag gtcaaataagg aatagcacta gatgtcattt 60  
 ggtatgaacc tataacagaa cttgatgaag acaaagacgc agcagcaaga gctatggact 120

tttcacttgg atggttcctt gaccacttt tctttgaaa atatcctctc tcaatggaga 180  
aacttgtagc taagagattg ccggagattt ctgatacagc ctcaaaattt cttgtgggat 240  
ctttggattt t 251

<210> 599  
<211> 252  
<212> DNA  
<213> Glycine max  
<400> 599

tatcatcggg acatggaaga tattgatctt atagccaagt tgggatttga tgcttataga 60  
ttttcaattt cttggtctcg gattttcccc gatggcttag gaacgaaaat caatgacgaa 120  
gggataactt tttataacaa cattattaat ggtcttcttg aaagaggtat acaaccttat 180  
gtaactttgt accattggga tcttccgctg catcttcacg agtcgatggg aggatgggta 240  
aataaacaaa tc 252

<210> 600  
<211> 418  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(418)  
<223> unsure at all n locations  
<400> 600

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tgtacatgtc agttatggag atactcttctg tctcttcat attcatatgc tctctcacac 120  
caatctcaca gtcacaggga ttacatcaat ctcccccttt tctctttggc acttcttctt 180  
cttcgtacca gtatgaagga gcttatttga gtgatggcaa agggataagc aactgggatg 240  
tcttcactca caaaccagggt agtatatctg acgaaagcaa cggatgatgtt gctgttgatc 300  
aataccaccg gtatctggag gatattgatc taatggaagc tataaaagggt caatagctac 360  
cggttttcaa tatcatgggc aagaattcta ccaaaggaa gatttggaga agtaaaact 418

<210> 601  
<211> 278  
<212> DNA  
<213> Glycine max

<400> 601  
 ttcatatgct ctctcacacc aatctcacag tcacagggat tacatcaatc tccccctttt 60  
 ctcttttgga cttcttcttc ttctgtaccag tatgaaggag cttatttgag tgatggcaaa 120  
 gggataagca actgggatgt cttcactcac aaaccaggta gtatatctga cgaaagcaac 180  
 ggtgatgttg ctgttgatca ataccaccgg tatctggagg atattgatct aatggaagct 240  
 ataaaagtca atagctaccg gttttcaata tcatgggc 278

<210> 602  
 <211> 426  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(426)  
 <223> unsure at all n locations

<400> 602  
 aaacgacaga aggggatcga agcaaaaaat gaaaacccaa agtgcttctc tcctctgtct 60  
 ttttctctct cttgctatcc ttttggttag tggcactgct gcaagtgcaa ctccaagaag 120  
 cgcagtgcc aagccaccatg tttcaacatt caacagaagc ctttttcctt ccacttttct 180  
 ctttgggaatt ggttcttctg cttaccaggc agaaggagca gcaagtgtag atgggagagg 240  
 accaagcata tgggacacct aactagaca gcatactgaa aagatttggg atcatagcac 300  
 cggtgacatg ggaactgant tttatcatcc atacaagggg tgacataaaa attagcgaaa 360  
 gaaanttggg ctggactcct tcanattccc caactcaang gtcaagaata ttcccaaaag 420  
 ggcaag 426

<210> 603  
 <211> 425  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(425)  
 <223> unsure at all n locations

<400> 603  
 aagacgacag aaggggatcg aagcaaaaaa tgaaaaccca aagtgttct ctctctgtc 60  
 ttttctctc tcttgctatc cttttggcta gtggcactgc tgcaagtga actccaagaa 120

gcgcagtgcc aagccaccat gtttcaacat tcaacagaag cctttttcct tccacttttc 180  
tcttttgaat tgggttcttct gcttaccagg cagaaggagc agcaagtgtg ggtgggagag 240  
gaccaagcat atgggacacc ggacacnagg acagcatact gaaaagattt gggatcatag 300  
cacccgtgac atgggaagtg aattttaagc anccgagnca anggttacat nanaattgcg 360  
aaaggnantt gggccgggac ccttttnanat tccnnaagnt cagggggcaa gaatatgccg 420  
aaagg 425

<210> 604  
<211> 270  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(270)  
<223> unsure at all n locations  
<400> 604

gcggattttc gtggctacgc aaacttctgc ttcaagacct ttggagacag agtcaaatat 60  
tgggtcactt tgaatgaacc cttatcattt agtctcaatg gctacaatgg tggcaccttt 120  
ggcaccaggt agatgttcaa atacgttgcc aattgtagtg ctggcgattc atccactgaa 180  
ccctatatcg ttggacacta cttattactt gncatgaat ctgctgccac attatacaag 240  
acaaatatca ggctcgtcaa aaaggacaat 270

<210> 605  
<211> 338  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(338)  
<223> unsure at all n locations  
<400> 605

tgaaaaccca aagtgtttct ctctctctgc tttttctctc tcttgctatc cttttggcta 60  
gtncgcactg ctgcaagtgc aactccaaga agcgcagtgc caagccacca tgtttcaaca 120  
ttcaacagaa gcctttttcc ttccactttt ctcttttgaa ttggttcttc tgcttaccag 180  
gcagaaggag cagcaagtgt agatgggaga ggaccaagca tatgggacac ctacactaga 240

cagcatactg aaaagatttg ggatcatagc accggtgaca tgggagctga tttttatcat 300  
cgatacaagg gtgacataaa aatagcgaaa gaaattgg 338

<210> 606  
<211> 324  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(324)  
<223> unsure at all n locations

<400> 606

aaaaatgana acccaaagtg cttctctcct ctgtcttttt ctctctcttg ctatcctttt 60  
ggctagtnng cactgctgca agtgcaatcc aagaagcgca gtgccaagcc accatgtttc 120  
aacattcaac agaagccttt ttccttccac ttttctcttt ggaattgggtt cttctgctta 180  
ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca agcatatggg acacctacac 240  
tagacagcat actgaaaaga tttgggatca tagcaccggt gacatgggag ctgattttat 300  
catcgataca agggtgacat aaaa 324

<210> 607  
<211> 243  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(243)  
<223> unsure at all n locations

<400> 607

caccggtgac atgggagctg atttttatca tcgatacaag ggtgacataa aaatagcgaa 60  
agaaattngg gctgtactct ttcagattct nctatctcat ggtcaagaat attcccaaag 120  
ggcaagggag cagttaaccc ccttgggggtt aaattctaca acaatgtcat cgatgagatc 180  
ctagcaaatg gtttaaaacc ttttgtcact ctttttcatt gggactttcc acaagctctt 240  
gaa 243

<210> 608  
<211> 300  
<212> DNA  
<213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(300)  
 <223> unsure at all n locations

<400> 608

gatagcaaga gagaganaaa gacagaggag agangcactg ctgcaagtgc aactccaaga 60  
 agcgcagtgc caagccacca tgtttcaaca ttcaacagaa gcctttttcc ttccactttt 120  
 ctctttggan ttggttcttc tgcttaccag gcagaaggag cagcaagtgt agatgggaga 180  
 ggaccaagca tatgggacac ctacactaga cagcactactg aaaagatttg ggatcatagc 240  
 accggtgaca tgggagctga tttttatcat cgatacaagg gtgataaaaa tagcgaaaga 300

<210> 609  
 <211> 253  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(253)  
 <223> unsure at all n locations

<400> 609

gnggcactgc tgcaagtgca actccaagaa ggcagtgcc aagccaccat gtttcaacat 60  
 tcaacagaag cctttttcct tccacttttc tctttggaat tggttcttct gcttaccagg 120  
 cagaaggagc agcaagtgta gatgggagag gaccaagcat atgggacacc tacactagac 180  
 agcactactga aaagatttgg gatcatagca ccggtgacat gggagctgat ttttatcatc 240  
 gatacaaggg tga 253

<210> 610  
 <211> 291  
 <212> DNA  
 <213> Glycine max

<400> 610

caaatgaaa acccaaagtg cttctctcct ctgtcttttt ctctctcttg ctatcctttt 60  
 ggctagtcgc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc accatgtttc 120  
 aacattcaac agaagccttt ttccttcac ttttctcttt ggacttggtt cttctgctta 180  
 ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca agcatatggg acacctacac 240

tagacagcat actgaaaaga tttgggatca tagcaccggt gacatgggag c 291

<210> 611  
<211> 286  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(286)  
<223> unsure at all n locations

<400> 611

ccaaagtgct tctctcctct gtctttttct ctctcttgct atccttttgg ctagtngcag 60  
tgctgcaagt gcaactccaa gaagcgcagt gccaaagccac catgtttcaa cattcaacag 120  
aagccttttt ccttccactt ttctcttttg anttggttct tctgcttacc aggcagaagg 180  
agcagcaagt gtagatggga gaggaccaag catatgggac acctacacta gacagcatac 240  
tgaaaagatt tgggatcata gcaccggtga catgggagct gatttt 286

<210> 612  
<211> 246  
<212> DNA  
<213> Glycine max

<400> 612

agatgttcta aatacgttgc caattgtagt gctggcgatt catccactga accctatata 60  
gttggaact acttattact tgctcatgaa tctgctgcca cattatacaa gacaaaatat 120  
caggctcgtc aaaaaggaca aattgggatc actaatccaa cacactactt ttgccaataa 180  
tctcaaagtg ctgcagatta caaggcagca agtagagctc tgggctcttc ttggttggt 240  
attctg 246

<210> 613  
<211> 285  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(285)  
<223> unsure at all n locations

<400> 613

ccaaagtgct tctctcctct gtctttttct ctctcttgct atccttttgg ctagtncgca 60



ctgctgcaag tgcaactcca agaagcgagc tgccaagcca ccatgtttca acattcaaca 120  
gaagcctttt tccttccact tttctctttg ganttggttc ttctgcttac caggcagaag 180  
gagcagcaag tgtagatggg ngaggaccaa gcatatggga cacctacact agacagcata 240  
ctgaaaagat ttgggatcat agcaccggtg acatgggagc tgatt 285

<210> 614  
<211> 286  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(286)  
<223> unsure at all n locations  
<400> 614

caaaaaatga aaacccaaag tgcttctctc ctctgtcttt ttctctctct tgctatcctt 60  
ttggctagtn cgcactgctg caagtgaac tccaagaagc gcagtgccaa gccaccatgt 120  
ttcaacattc aacagaagcc tttttccttc cacttttctc tttggaattg gttcttctgc 180  
ttaccaggca gaaggagcag caagtgtaga tgggagagga ccaagcatat gggacaccta 240  
cactagacag catactgaaa agatttggga tcatagcacc ggtgac 286

<210> 615  
<211> 186  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(186)  
<223> unsure at all n locations  
<400> 615

caaacttctg cttcaagacc tttggagaca gagtcaaata ttgggtcact ttgaatgaac 60  
cctatcattt agtcctcaat ggctacaatg gtggcacctt tgcaccagggt agatgttcta 120  
aataacgttg ccaattgtag tgctggcgat tcatccactg anccctannt nnttggacac 180  
tactta 186

<210> 616  
<211> 278  
<212> DNA

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<213>      Glycine max

<220>
<221>      unsure
<222>      (1)...(278)
<223>      unsure at all n locations

<400>      616

gaaaacccaa agtgcttctc tcctctgtct tttctgctc tgcttgctat ctttttggct   60
agtngcactg ctgcaagtgc aactccaaga agcgcagtgc caagccacca tgtttcaaca  120
ttcaacagaa gcctttttcc ttccactttt ctctttggaa ttggttcttc tgcttaccag  180
gcagaaggag cagcaagtgt agatgggaga ggaccaagca tatgggacac ctacactaga  240
cagcactactg aaaagatttg ggatcatagc accgggtga                          278

<210>      617
<211>      277
<212>      DNA
<213>      Glycine max

<220>
<221>      unsure
<222>      (1)...(277)
<223>      unsure at all n locations

<400>      617

cccaaagtgc ttctctcctc tgtctttttc tctctcttgc tctcttttg gctagtngca   60
ctgctgcaag tgcaactcca agaagcgcag tgccaagcca ccatgtttca acattcaaca  120
gaagcntttt tccttcact tttctctttg gtgttggttc ttctgcttac caggcagaag  180
gagcagcaag tgtagatgng agaggaccaa gcatatggga cacctacact agacagcata  240
ctgaaaagga tttgggatca tagcaccggt gacatgg                          277

<210>      618
<211>      277
<212>      DNA
<213>      Glycine max

<220>
<221>      unsure
<222>      (1)...(277)
<223>      unsure at all n locations

<400>      618

gaaaacccaa agtgcttctc tcctctgtct tttctctctc cttgctatcc ttttggctag   60

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tngcactgct gcaagtgcaa ctccaagaag cgcagtgcc agccaccatg tttcaacatt 120  
 caacagaagc ctttttcctn ccacttttct ctttggaatt ggttcttctg cttaccaggc 180  
 agaaggagca gcaagtgtag atgggagagg accaagcata tgggacacct acactagaca 240  
 gcatactgaa aagattggga tcatagcacc ggtgaca 277

<210> 619  
 <211> 271  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(271)  
 <223> unsure at all n locations  
 <400> 619

aaatgaaaac ccaaagtgct tctctcctct gtctttttct ctctcttgct atccttttgg 60  
 ctagtngcac tgctgcaagt gcaactccaa gaagcgcagt gccaaagccac catgttcaac 120  
 attcaacaga agcctttttc cttccacttt tctcttttga cttgggttctt ctgcttacca 180  
 ggcagaagga gcagcaagtg tagatgggag aggaccaagc atatgggaca cctacactag 240  
 acagcatant gaaaagattg gggntcatan c 271

<210> 620  
 <211> 255  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(255)  
 <223> unsure at all n locations  
 <400> 620

cccaaagtgc ttctctctc tgtctttttc tctctcttgc tctcttttg gctagtngca 60  
 ctgctgcaag tgcaactcca agaagcgcag tgccaagcca ccatgtttca acattcaaca 120  
 gaagcctttt tccttccact tttctctttg gaattggttc ttctgcttac caggcagaag 180  
 gagcagcaag tgtagatggg agaggaccaa gcatatggga cacctacact agacagcata 240  
 ctgaaaagat ttggg 255

<210> 621  
 <211> 260

<212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(260)  
 <223> unsure at all n locations  
  
 <400> 621  
  
 aaaacccaaa gtgcttctct cctctgtctt tttctctctc ttgctatcct tttggctagt 60  
 ngcactgctg caagtgaac tccaagaagc gcagtgccaa gccaccatgt ttcaacattc 120  
 aacagaagcc tttttccttc cacttttctc tttggaattg gttcttctgc ttaccaggca 180  
 gaaggagcag caagtgtaga tgggagagga ccaagcatat gggacaccta cactagacag 240  
 catactgaaa agatttgga 260

<210> 622  
 <211> 261  
 <212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(261)  
 <223> unsure at all n locations  
  
 <400> 622  
  
 aaatgaaaac ccaaagtgtc tctctctctc gtctttttct ctctcttgct atccttttgg 60  
 ctagtngcac tgctgcaagt gcaactncca agaagcgcag tgccaagcca ccatgtttca 120  
 acattcaaca gaagcctttt tccttccact tttctctttg ganttggttc ttctgcttac 180  
 caggcagaag gagcagcaag tgtagatggg agaggaccaa gcatatggga cacctacact 240  
 agacagcata ctgaaaagat t 261

<210> 623  
 <211> 279  
 <212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(279)  
 <223> unsure at all n locations  
  
 <400> 623  
  
 tgaatgaacc cttatcnttt agtctcaatg ggctacnatg gtggcacctt tgcaccaggt 60



<211> 264  
 <212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(264)  
 <223> unsure at all n locations  
  
 <400> 626  
  
 gttctaggct cccaaaattc acaaaagctg aatctgaagg tctaaaaaat tccatagatt 60  
 ttccttggtg tgaattacta caccacttat tatgcggaac atgctgaacc tgtcagtgcc 120  
 aaccgaacct tctacacaga catacnacnn ngctctcagta cggaaaggaa tggctctacat 180  
 gttggaaccc cgactgattt gaattggctc tttatctttc caaagggaat tcatcttcta 240  
 ggggcacaca taaaggataa atac 264

<210> 627  
 <211> 146  
 <212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(146)  
 <223> unsure at all n locations  
  
 <400> 627  
  
 tgggtggcacc tttncaccag gtagatgttc taaatacggt gccaatgtga gtgctggcga 60  
 ttcancact gtaccctata tcgttggaac ctacttatta cttgctcatg aatctgntgc 120  
 cacattatac aagacaaaat atcagg 146

<210> 628  
 <211> 258  
 <212> DNA  
 <213> Glycine max  
  
 <400> 628  
  
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 ctgctgcaag tgcaactcca agaagcgcag tgccaagcca ccatgtttca acattcaaca 120  
 gaagcctttt tccttccact tttctcttgc gaattgggtc ttctgcttac caggcagaag 180  
 gagcagcaag tgtagatggg agaggaccaa gcatatggga cacctacact agacagcata 240  
 tgaaaagatt tgggatca 258

<210> 629  
 <211> 260  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(260)  
 <223> unsure at all n locations

<400> 629

aaacccaaag tgnttctctc ctctgtnttt ttctctctct tgctatcctt ttggctagtn 60  
 gcactgctgc aantgcaact ccaagaagcg cagtgccaaag ccaccatggt tcaacattca 120  
 acagaagcct ttttccttcc acttttctct ntgggtantgg ttcttctgct taccaggcag 180  
 aaggagcagc aagtgtagat gggagangac caagcatatg ggacacctac actagacagc 240  
 atactgaaaa gattgggatc 260

<210> 630  
 <211> 261  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(261)  
 <223> unsure at all n locations

<400> 630

ganaacccaa agtgcttctc tcctctgtct ttttctctct cttgctatcc ttttggctag 60  
 tngcactgct gcaagtgcaa cttccaagaa gcgcagtgcc aagccaccat gtttcaacat 120  
 tcaacagaag cctttttcct tccacttttc tctttggact tggttcttct gcttaccagg 180  
 cagaaggagc agcaagtgta gatgggagag gaccaagcnt atgggacacc tacactagac 240  
 agcatactgn naagatttgg g 261

<210> 631  
 <211> 271  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(271)  
 <223> unsure at all n locations





<212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(261)  
 <223> unsure at all n locations

<400> 634

gcttctctcc tctgtctttt tctctctctt gctatccttt tggctagtgg cactgctgca 60  
 agtgcaactc caagaagcgc agtgccaagc caccatgttt caacattcaa cagaagcctt 120  
 tttccttcca cttttctctt tgganttggt tcttctgctt accaggcaga nggagcagca 180  
 agtgtagatg ggagaggact aagcatatgg gacacctaca ctagacagca tactgaaaag 240  
 atttgggatc atagcaccgg t 261

<210> 635  
 <211> 272  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(272)  
 <223> unsure at all n locations

<400> 635

aatgaaaacc caaagtgctt ctctcctctg tctttttctc tctcttgcta tccttttggc 60  
 tagtngcact gctgcaagtg caacttccaa gaagcgcagt gccagccac catgnttcaa 120  
 cattcaacag aagccttttt ccttccagtt ntctntttgg aattggttct tcngcttacc 180  
 aggcagaagg agcngcaagt gtananggga gaggaccaag canatgggag anatacacna 240  
 gngaggatan tgaaaagntt tggggtcata gc 272

<210> 636  
 <211> 248  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(248)  
 <223> unsure at all n locations

<400> 636

aaaaatgaaa ncccaaagtg cttctctcct ctgtcttttt ctctctcttg ctatcctttt 60

ggctagtggc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc accatgtttc 120  
aacattcaac agaagccttt ttcttccac tttctctttt ggacttggtt cttctgctta 180  
ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca agcatatggg acacctacac 240  
tagacagc 248

<210> 637  
<211> 246  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(246)  
<223> unsure at all n locations  
<400> 637

aaaatgaaaa cccaaagtgc ttctctcctc tgtctttttc tctctcttgc tctccttttg 60  
gctagtngca ctgntgcaag tgcaactcca agaagcgagc tgccaagcca ccatgtttca 120  
acattcaaca gaagcctttt tccttccact tttctctttg ganttggttc ttctgcttac 180  
caggcagaag gagcagcaag tgtagatggg agaggaccaa gcatatggga cacctacact 240  
agacag 246

<210> 638  
<211> 243  
<212> DNA  
<213> Glycine max  
<220>  
<221> unsure  
<222> (1)...(243)  
<223> unsure at all n locations  
<400> 638

cccaaagtgc ttctctcctc tgtctttttc tctctcttgc tctccttttg gctagtngca 60  
ctgctgcaag tgcaactcca agaagcgagc tgccaagcca ccatgtttca acattcaaca 120  
gaagcctttt tccttccact tttctctttg gaattgggttc ttctgcttac caggcagaag 180  
gagcagcaag tgtagatggg agaggaccaa gcatatggga cacctacact agacagcata 240  
ctg 243

<210> 639

<211> 246  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(246)  
 <223> unsure at all n locations

<400> 639

tgaaaaccca aagtgttct ctctctgtc tttttctctc tcttgctatc cttttggcta 60  
 gtngcactgc tgcaagtgca actccaagaa gcgcagtgcc aagccaccat gtttcaacat 120  
 tcaacagaag ccttttttct tccacttttc tctttgggct tggttcttct gcttaccagg 180  
 cagaaggagc agcaagtgtg gatggggagag gaccaagcat atgggacacc tacactagac 240  
 agcata 246

<210> 640  
 <211> 247  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(247)  
 <223> unsure at all n locations

<400> 640

gaaaacccaa agtgcttctc tcctctgtct ttttctctct cttgctatcc ttttggctag 60  
 tngcactgct gcaagtgcaa cttccaagaa gcgcagtgcc aagccaccat gtttcaanca 120  
 ttcaacagag ccctttttcc ttccactttt ctctttggan ttggttcttc tgcttaccag 180  
 gcagaaggag cagcaagtgt agatgggaga ggaccaagca tatgggacac ctacactaga 240  
 cagcata 247

<210> 641  
 <211> 270  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(270)  
 <223> unsure at all n locations

<400> 641

gatcgaagca naanatgaaa acccaaagtg gcttctctcc tctgccnttt tctctctctt 60  
 ggctaatacct tttgggctag tngcactggc tgcaagtgc actccaagaa gcgcagtgcc 120  
 aagccacat gtttcagcat tcaacagaag cctttttcct tccacttttc tctttggaat 180  
 tggttcttct gcttaccagg cagaaggagc agcaagtgt gatgggagag gnccaagcat 240  
 atgggacacc tacactagac agcatactga 270

<210> 642  
 <211> 255  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(255)  
 <223> unsure at all n locations

<400> 642  
 taaatgnaaa cccaaagtgc ttctctcctc tgtctttttc tctctctngc tatccttttg 60  
 gctantngca ctgctgcaag tgcaactcca ngaagcgcag tgccaagcca ccatgtttca 120  
 acattcaaca gaagcctttt tccttnact tttctctttg gaattgggtc ttctgcttac 180  
 caggcagaag gagcagcaag tgtagatggg agaggaccna ncatatggga cacctacact 240  
 agacagcata ctgnc 255

<210> 643  
 <211> 252  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(252)  
 <223> unsure at all n locations

<400> 643  
 gatcgaagca aaaaatgaaa acccaaagtg cttctctcct ctgtcttttt ctctctcttg 60  
 ctatcctttt ggctagtggc actgctgcan ccgcaactcc aagaagcgca gtgccaagcc 120  
 accatgtttc aacattcaac agaagccttt ttcttccac ttttctcttt ggaattgggt 180  
 cttctgctta ccaggcagaa ggagcancaa gtgtagatgg gagaggacca agcatatggg 240  
 acacctacac ta 252

<210> 644  
 <211> 239  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(239)  
 <223> unsure at all n locations

<400> 644

tgaaaaccca aagtgcttct ctctctgtc tttttctctc tcttgctatc cttttggcta 60  
 gtggcactgc tgcaagtgna antccaagaa gcgcagtgcc aagccaccat gtttcaacat 120  
 tcaacagaag cctttttcct tccacttttc tctttggant tggttcttct gcttaccagg 180  
 cagaaggagc agcaagtgta gatgggagag gaccaagcat atgggacacc tacactaga 239

<210> 645  
 <211> 254  
 <212> DNA  
 <213> Glycine max

<400> 645

gatcgaagca aaaaatgaaa acccaaagtg cttctctcct ctgtcttttt cactctcttg 60  
 ctatcctttt ggctagtggc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc 120  
 accatgtttc aacattcaac agaagccttt ttcttccac ttttctcttt ggaattgggt 180  
 cttctgtctca ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca agcatatggg 240  
 acacctacac taga 254

<210> 646  
 <211> 119  
 <212> DNA  
 <213> Glycine max

<400> 646

ccgggagagt atgaaatctt cagtaggttc taggctccca aaattcacia aagctgaatc 60  
 tgaaggtcta aaaaattcca tagattttct tgggtgtaat tactacacca cttattatg 119

<210> 647  
 <211> 249  
 <212> DNA  
 <213> Glycine max

<220>

<221> unsure  
<222> (1)...(249)  
<223> unsure at all n locations

<400> 647

cttgctgcct tgnctctgc agcaagtaga nctctggact tcttctntgg ttggtnttct 60  
gatccggttt tctatggtga ctatccggcg agtatgnant cttcagtagc ntctaggntc 120  
ccanaattca cnaaagctga ntctgaaggt ctanaaantt ccatagnttt tcttggtgtg 180  
nnttantnca ncacttnttn tgcggaacat gctgaacctg tcagtgccaa ccgaacntct 240  
acacagaca 249

<210> 648  
<211> 250  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(250)  
<223> unsure at all n locations

<400> 648

ggaagcaaaa natgaaaacc caaagtgtt ctctctcan tcttttctc tctcttgcta 60  
tccttttggc tagtggcact gctgcaagt caactccaag aagcgagtg ccaagccacc 120  
atgtttcaac attcaacaga agcctttttc cttccacttt tctctttgga attggttctt 180  
ctgcttacca ggcagaagga gcagcaagt tagatgggag aggaccaagc atatgggaca 240  
cctacactag 250

<210> 649  
<211> 237  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(237)  
<223> unsure at all n locations

<400> 649

caaaaaatga aaacccaaag tgcttctctc ctctgtcttt ttctctctnt tgctatcctt 60  
ttggctagtgc gactgctgc aagtgcaact ccaagaagcg cagtgccaaag ccaccatggt 120  
tcaacattca acagaagcct ttttccttcc acttttctct ttggaattgg ttcttctgct 180

taccaggcag aaggagcagc aagtgtagat gggagaggac caagcatatg ggacacc 237

<210> 650  
 <211> 252  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(252)  
 <223> unsure at all n locations

<400> 650

gatcgaagca aaaaatgaaa acccaaagtg cttctgtctcc tctgtctttt tctctctctt 60  
 gctatccttt tggctagtng cactgctgca agtgcaactc caagaagcgc agtgccaagc 120  
 caccatgntt caacattcaa cagaagcctt tttccttoca cttttctctt tggaattggg 180  
 tcttctgctt accaggcaga aggagcagca agtgtagatg ggagaggacc aagcatatgg 240  
 gacacctaca tt 252

<210> 651  
 <211> 251  
 <212> DNA  
 <213> Glycine max

<400> 651

gatcgaagca aaaaatgaaa acccaaagtg cttctctcct ctgtcttttt ctctctcttg 60  
 ctatcctttt ggctagtggc actgctgcaa gtgcaactcc aagaagcgc gtgccaagcc 120  
 accatgtttc aacattcaac agaagccttt ttccttccac ttttctcttt ggaattgggt 180  
 cttctgctta ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca agcatatggg 240  
 acacctacac t 251

<210> 652  
 <211> 251  
 <212> DNA  
 <213> Glycine max

<400> 652

gatcgaagca aaaaatgaaa acccaaagtg cttctctcct ctgtcttttt ctctctcttg 60  
 ctaccctttt ggctagtggc actgctgcaa gtgcaactcc aagaagcgc gtgccaagcc 120  
 accatgtttc aacattcaac agaagccttt ttccttccac ttttctcttt ggaattgggt 180







ttcaacagaa gcctttttcc ttccactttt ctctttggan ttggttcttc tgctttccag 180  
gcagaaggag cagcaagtgt agatgggaga ggaccaagca tatgggacac ctncactaga 240  
cagcata 247

<210> 658  
<211> 254  
<212> DNA  
<213> Glycine max  
  
<220>  
<221> unsure  
<222> (1)...(254)  
<223> unsure at all n locations  
  
<400> 658

gatcgaagca aaaaatgaaa acccaaagtg cttctctcct ctgtcttttt ctncctctctt 60  
ngctatcctt ttggctagtn gcactgctgc aagtgcact ccaagaagcg cagtgccaaag 120  
ccaccatggt tcaacattca acagaagcct ttttccttcc actttttctct ttggaattgg 180  
ttctttctgct taccaggcag aaggagcagc aagtgtagat gggagaggac caagcatatg 240  
ggacacctac atag 254

<210> 659  
<211> 169  
<212> DNA  
<213> Glycine max  
  
<220>  
<221> unsure  
<222> (1)...(169)  
<223> unsure at all n locations  
  
<400> 659

cagtgccaaag ccacatgttt caacattcaa cagaagcctt tttccttcca cttttctctt 60  
tggaattggt tcttctgctt accaggcaga aggagcagca agtgtagatn nngagaggac 120  
caagcatatg ggacacctac actagacagc atactgaaaa gattgggat 169

<210> 660  
<211> 267  
<212> DNA  
<213> Glycine max  
  
<220>  
<221> unsure  
<222> (1)...(267)



<210> 663  
 <211> 247  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(247)  
 <223> unsure at all n locations

<400> 663

gatcgaagca aaaaatgaaa acccaaagtg cttctctcct ctgtcttttt ctctctcttg 60  
 ctatcctttt ggctagtngc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc 120  
 accatgtttc aacattcaac agaagccttt ttcttccac ttttctcttt ggaattggtt 180  
 cttctgctta ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca agcatatggg 240  
 acaccta 247

<210> 664  
 <211> 248  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(248)  
 <223> unsure at all n locations

<400> 664

gggacatcga agcaaaaaat gaaaacccaa agtgcttctc tcctctgtct ttttctctct 60  
 cttgctatcc ttttggctag tggcactgct gcaagtgcaa ctccaagaag cgcagtgcc 120  
 agccaccatg tttcaacatt cancagaagc ctttttctct ccacttttct ctttgggaatt 180  
 ggttcttctg cttaccaggc agaaggagca gcaagtgtag atgggagagg accaagcata 240  
 tgggacac 248

<210> 665  
 <211> 248  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(248)  
 <223> unsure at all n locations

<400> 665

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 ctatccnttt ggctagtngc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc 120  
 ancatgttcc aacattcaac agaagccttt ttccttccac ttttctcttt ggaattgggt 180  
 cttctgctta ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca agcatatggg 240  
 gcacctac 248

<210> 666  
 <211> 242  
 <212> DNA  
 <213> Glycine max

<400> 666

gatcgaagca aaaaatgaaa acccaaagtg cttctctcct ctgtcttttt ctctctcttg 60  
 ctatccnttt ggctagtggc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc 120  
 accatgtttc aacattcaac agaagccttt ttccttccac ttttctcttt ggaattgggt 180  
 cttctgctta ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca agcatatggg 240  
 ac 242

<210> 667  
 <211> 247  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(247)  
 <223> unsure at all n locations

<400> 667

gatcgaagca aaaaatgaaa acccaaagtg cttctctcct ctgtcttttt ctctctcttg 60  
 ctatccnttt ggctagtggc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc 120  
 accatgtttc aacattcaac agaagccttt ttccttccac ttttctcttt ggaattgggt 180  
 cttctgctta ccaggcagaa ggagcagcaa gtgtagatgg nngaggaccn nnnatatggg 240  
 acacctta 247

<210> 668  
 <211> 274  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(274)  
 <223> unsure at all n locations

<400> 668

caaaaaatga aaacccaaag tgcttctctc ctgntgtctt tttctctctc ttgctatcct 60  
 tttggctagt ngcactgctg caagtncaac tccaagaagc gcagtgccaa gncagcatgt 120  
 ttcaacattc aacagaagcc tttttccttc cacttttctc tttgganatg gttcttctgc 180  
 ttaccaggca gaaggagcag caagtgtaga tgggagnagn ccaagcatat gggacaccta 240  
 catagacagc atactgaaaa gattgggatn atac 274

<210> 669  
 <211> 244  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(244)  
 <223> unsure at all n locations

<400> 669

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 ctatcctttt ggctagtngc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc 120  
 accatgtttc aacattcaac agaagccttt ttccttccac ttttctcttt ggaattgggt 180  
 cttctgctta ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca agcatatggg 240  
 acac 244

<210> 670  
 <211> 243  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(243)  
 <223> unsure at all n locations

<400> 670

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 ctatcctttt ggctagtngc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc 120

accatgtttc aacattcaac agaagccttt ttccttccac ttttctcttt ggaattgggt 180  
 cttctgctta ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca agcatatggg 240  
 acc 243

<210> 671  
 <211> 251  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(251)  
 <223> unsure at all n locations  
 <400> 671

gatcgaagca aaaaatgaaa acccaaagtg cttctctcct ctgtcttttt ctctctcttg 60  
 ctatcctttt ggctagtngc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc 120  
 accatgtttc aacattcaac agaagccttt ttccttccac ttttctcttt gganttggtt 180  
 cttctgctta ccaggcagaa ggagcagcaa gtgtagatgg gagaggacca gcatatggga 240  
 cacctacact a 251

<210> 672  
 <211> 275  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(275)  
 <223> unsure at all n locations  
 <400> 672

gggaatcctn cgtaaggtaa acggcnaagg tngtaaggaa tcattgccat ctttctactt 60  
 tacttttggtg anagctncca gggacaccta cactagacag catactgaaa agatttggga 120  
 tcatagcacc ggtgacatgg gagctgattt ttatcatcga tacaaggggtg acatacanca 180  
 agcganagan attgggctgg actcttttcag attctctatc tcatgggtcaa gaatattccc 240  
 aanggnagg gagcagttaa ccccttggtg gttaa 275

<210> 673  
 <211> 241  
 <212> DNA

<213> Glycine max  
 <400> 673  
 gatcgaagca aaaaatgaaa acccaaagtg cttctctcct ctgtcttttt ctctctcttg 60  
 ctatcctttt ggctagtggc actgctgcaa gtgcaactcc aagaagcgca gtgccaagcc 120  
 accatgtttc aacattcaac agaagccttt ttctctccac ttttctcttt ggaattgggt 180  
 cttctgctta ccaggcagaa ggagcagcaa gtgtagatgg gagagggcca agcatatggg 240  
 a 241

<210> 674  
 <211> 223  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(223)  
 <223> unsure at all n locations

<400> 674  
 gaaaacccaa agtgcttctc tcctctgtct ttttctctct cttgctatcc ttttggttag 60  
 tggcactgct gcaagtgcaa ctccaagaag cgcagtgccca agccaccatg tttcaacatt 120  
 caacagaage ctttttctct ccacttttct ctttggannt gggtctctctg cttaccaggc 180  
 agaaggagca gcaagtgtag atgggagagg accaagcata tgg 223

<210> 675  
 <211> 286  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(286)  
 <223> unsure at all n locations

<400> 675  
 gtaacagcaa tggagctgtc ttccagtgc tttgtggtaa tattgttggc agtcgcagct 60  
 acagcagtac tctgcaaatg gggttgatct atctttcntg cccagcgatt tctctnttgg 120  
 cattgcttct tcctcttacc agtatgaagg agcttacaag agtgacggca aaggactgag 180  
 caactgggat aactacactc acggaccagg tagaagtgta ataatggatg gaagcaatgg 240  
 ggatatcgcg attgatcatt atcatcgcta cctggaggat atagat 286



<210> 676  
 <211> 261  
 <212> DNA  
 <213> Glycine max  
  
 <400> 676  
  
 gttggcagtc gcagctacag cagtactctc aaatggggtg gatctatctt tcttgcccag 60  
 cgatttcctc tttggcattg cttcttcctc ttaccagtat gaaggagctt acaagagtga 120  
 cggcaaagga ctgagcaact gggataacta cactcacgga ccaggtagaa gtgtaataat 180  
 ggatggaagc aatgggggata tcgcgattga tcattatcat cgctacctgg aggatataga 240  
 tttaatggaa actttgggag t 261

<210> 677  
 <211> 260  
 <212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(260)  
 <223> unsure at all n locations  
  
 <400> 677  
  
 cagatagaag gagcagcagc tatagatggc agaggaccaa gtatatggga cacctatact 60  
 aaacagcaac caggaagat ttgggatcat agtgatggaa gtctagcaat tgatttttat 120  
 caccggtaca agacgacata aagatggtga nagaagtngg gttggattca tacagatttt 180  
 ccatctcatg gtccagaata ttccccaagg gcaagggagc agttaacacc ttgggggtca 240  
 agttctacaa cgatctcatt 260

<210> 678  
 <211> 263  
 <212> DNA  
 <213> Glycine max  
  
 <220>  
 <221> unsure  
 <222> (1)...(263)  
 <223> unsure at all n locations  
  
 <400> 678  
  
 agatagaagg agcagcagct atagatggca gaggaccaag tatatccgga cacctatact 60

aaacagcaac canggaagat ttgggatcan agtgatggaa gtctagcaat tgatTTTTat 120  
 caccggtaca agagcacata aagatggtga aagaagttgg gttggattca tacagatttt 180  
 ccatctcatg gtccagnata tttcccnng gggcnaggga gcagtaacac cntngggggc 240  
 ccantctncc aagancncct ttt 263

<210> 679  
 <211> 301  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(301)  
 <223> unsure at all n locations  
 <400> 679

anatgaacca tatggctaca gcgtgaatgg ctacagtggg ggaaattttg caccaggtag 60  
 atgttctaac tangttggaa aatgccctgc nggtgattct tccaccgagc cctacattgt 120  
 taaccaccac ttaatacttg ctcatggagc agcagtcaat tgctacaaga acaaatacca 180  
 ggctcatcag anaggacaaa ttgngtcac catagtgact ttcttctttg aaccaaatac 240  
 taatagtgat gctgatcgca aggagcaag gcgagctctg gacttatgtt tggctgggtt 300  
 g 301

<210> 680  
 <211> 271  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(271)  
 <223> unsure at all n locations  
 <400> 680

angtttgaga attganttcg ttcagatttg aaaatgtggg ttaaggttgt tccttcttct 60  
 ccttgagca ctttctcttt ttcacttagc cgcagcttac tcttaatcgt agcagttttt 120  
 cagcagattt cttcttttga acagcttctt cagcttacca gtatgaaggt gcagcacgtg 180  
 aaggtggcaa gggacctagt atatgggaca ccttactgc atagccaccc agatagaata 240  
 gcagaccaca gtaatgggga gttgcatga t 271

<210> 681  
 <211> 452  
 <212> DNA  
 <213> Glycine max

<400> 681

aacaaagtaa gagttcactc aatctcactg tgttgtgagt tgttgtgag caccaaccaa 60  
 caatgggtgtc tctgactccg ttatgtttct ttattacctt gttgatcgct ggtgcagacg 120  
 cagcggcgga gccccaaacg gtgcgttttg acaccggggg gttgagcaga gacacctttc 180  
 ccaaaggatt cttattcgga acggccacgt ctgcgtacca agtggagggg atggcccaca 240  
 aagacggtcg cggcccaagc atttgggacg tcttcatcaa aaaaccggg attgtcgcaa 300  
 ataatggcac gggagaagtt tctgttgatc aagtaccatc gctacaaaga agatatagat 360  
 ctcatggcca gcctgaattt tgatgcctac cggttctcaa tctcgtggtc cagaatTTTT 420  
 ccaaattggaa ctggccaagt aaattggaaa ag 452

<210> 682  
 <211> 357  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(357)  
 <223> unsure at all n locations

<400> 682

cttcatcaaa aaaccggga ttgtcgcaa taatggcacg ggagaagttt ctgttgatca 60  
 gtaccatcgc tacaagaag atatagatct catggccagc ctgaattttg atgcctaccg 120  
 gttctcaatc tcgtgggtcca gaatttttcc aaatggaact ggccaagtaa attggaangg 180  
 tgtagcatac tacaataggt tgatcaatta cttgctagag aaaggtatta ctccatatgc 240  
 aaatctctac cattatgatc ttcctttagc acttgaggag aggtacaacg gattattgag 300  
 tcgccaagtt gtgaaagatt ttgcagatta tgcagaattt tgtttcaaga cttttgg 357

<210> 683  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(444)



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 caccaaccaa caatggtgtc tctgactccg ttatgtttct ttattacctt gttgatcgct 120  
 ggtgcagacg cagcggcgga gccccaaacg gtgcgttttg acaccggggg gttgagcaga 180  
 gacacctttc ccaaaggatt cttattcgga acggccacgt ctgcgtacca agtggagggt 240  
 atggcccaca aagacggtcg cggcccaagc atttgggacg tcttcatcaa aaaacccggg 300  
 attgtcgcaa ataatggcac gggagaagtt tctgttgatc agtaccatcg ctacaaagaa 360  
 gatatagatc tcatggccag cc 382

<210> 686  
 <211> 277  
 <212> DNA  
 <213> Glycine max

<400> 686

gtaaattgga aaggtgtagc atactacaat aggttgatca attacttgct agagaaaggt 60  
 attactccat atgcaaactc ctaccattat gatcttcctt tagcacttga ggagaggtac 120  
 aacggattat tgagtcgcca agttgtgaaa gattttgcag attatgcaga attttgttta 180  
 tacgactttt ggagatagag ttaagaattg gatgacgttt aacgaacctc gtgtggtggc 240  
 tgctcttggc tatgataatg gtttctttgc cccggaa 277

<210> 687  
 <211> 262  
 <212> DNA  
 <213> Glycine max

<400> 687

gcgacgtctg cgtaccaagt ggagggtatg gccacaaaag acggtcgcgg cccaagcatt 60  
 tgggacctct tcatcaaaaa acccgggatt gttgcaaata atggcacggg agaagtttct 120  
 gttgatcagt accatcgcta caaagaagat atagatctca tggccagctt gaattttgat 180  
 gcctaccggt tctcaatctc gtggtccaga atttttccaa atggaactgg ccaagtaaat 240  
 tggaaagggtg tagcatacta ca 262

<210> 688  
 <211> 272  
 <212> DNA  
 <213> Glycine max

<220>



<210> 691  
 <211> 246  
 <212> DNA  
 <213> Glycine max

<400> 691

gccaaagtaaa ttggaaaggt gtagcatact acaataggct gatcaattac ttgctagaaa 60  
 aaggtattac tccatatgca aatctctacc attatgatct tccttttagca cttgaggaga 120  
 ggtacaacgg attattgagc cggcaagttg tgaatgattt tgcagattat gcagaatttt 180  
 gtttcaagac ttttgagat agagttaaga attggatgac gtttaatgaa cctcgtgtgg 240  
 tggctg 246

<210> 692  
 <211> 277  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(277)  
 <223> unsure at all n locations

<400> 692

agtaagagtt cactcaatct cactgtgttg tgagttgtgt gtgagcacca accaacaatg 60  
 gtgtctctga ctccgttatg tttctttatt accttggtga tcgctgggtgc anacgcagcg 120  
 gcggagcccc aaacggtgcg ttttgacacc gggggggtga ncagagacac ctttcccaaa 180  
 ggattcttat tcggaacggc cacgtctgcg taccaagtgg agggatatggc ccacaaagac 240  
 ggtcgcggcc caagcatttg ggacgtcttc atcaaaa 277

<210> 693  
 <211> 294  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(294)  
 <223> unsure at all n locations

<400> 693

caaaaacaaa aacaaagtaa gagttcactc aatctcactg tgttgtagt tgtgtgnag 60  
 caccaaccaa caatgggtgc tctgactccg ttatgtttct ttattacott gttgatcgct 120





<220>  
 <221> unsure  
 <222> (1)...(263)  
 <223> unsure at all n locations

<400> 696

ctcaatctca ctgtgttggt agtngtgtgt gagcaccaac caacaatngt gtctctgact 60  
 ccgttatggt tctttattac cttgttgacc gctggtgcag acgcagcggc gganccccaa 120  
 acggtgcgtt ttgacaccgg ggggttgagc agagacacct ttcccaaagg attcttattc 180  
 ggaacggcca cgtctgcgta ccaagtggag ggtatggccc acaaagacgg tcgcggccca 240  
 agcatttggg acgtcttcat caa 263

<210> 697  
 <211> 285  
 <212> DNA  
 <213> Glycine max

<400> 697

aaaacaaaaa caaagtaaga gttcactcaa tctcactgtg ttgtgagttg tgtgtgagca 60  
 ccaaccaaca atggtgtctc tgactccggt atgtttcttt attaccttgt tgatcgctgg 120  
 tgcagacgca ccggcgggag cccaaacgtg cgttttgaca ccgggggggt gagcagagac 180  
 acctttccca aaggattctt attcggaaac gccacgtctg cgtaccaagt ggagggtatg 240  
 gccacaaaag acggtcgcgg cccaagcatt tgggacgtct tcac 285

<210> 698  
 <211> 287  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(287)  
 <223> unsure at all n locations

<400> 698

caaaaacaaa aacaaagtaa ganttcactc aatctcactg tgttgtgagt tgtgtgtgag 60  
 caccaacca caatngtgtc tctgactccg ttatgtttct ttattacctt gttgatcgct 120  
 ggtgcagacg cagcggcgga cccaaacgtg tgcgttttga caccgggggg ttgagcagag 180  
 acacctttcc caaaggattc ttattcggaa cggccacgtc tgcgtaccaa gtggagggta 240

tggcccacaa agacgggtcgc ggcccagca tttgggacgt cttcatc 287

<210> 699  
<211> 274  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(274)  
<223> unsure at all n locations

<400> 699

ctcaatctca ctgtgttgtg agttgttgtg gagcaccaac caacaatggg gtctctgact 60  
ccgttatgtt tctttattac cttgttgatc gctggtgcag acgcagcggc gganncccaa 120  
acgggtgcgtt ttgacaccgg ggggttgagc agagacacct ttcccaaagg attcttattc 180  
ggaacggcca cgtctgcgta ccaagtggag ggtatggccc acaaagacgg tcgcggccca 240  
agcatttggg acgtcttcat caaaaaaccc ggga 274

<210> 700  
<211> 262  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(262)  
<223> unsure at all n locations

<400> 700

ctcaatctca ctgngttatg agttatgtgt gagcnccaac caacaanggn gtctctgact 60  
accgtnatgg ttctntatta cttgtngat cgctggtgca gacgcagcgg cggagcccaa 120  
acgngcgtn ttgacaccgg gggngtgagc agagacacct ttcccaaagg nttcttattc 180  
ggaacggcca cgtctgcgta ccaagtggag ggtatggccc acaaagacgg tcgcggccca 240  
agcatttggg acgtctnecat ca 262

<210> 701  
<211> 254  
<212> DNA  
<213> Glycine max

<220>  
<221> unsure  
<222> (1)...(254)

<223> unsure at all n locations

<400> 701

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gttcactcaa tctcactgtg ttgtgagtng tgtgtgagca ccaaccaaca atggtgtctc 60
tgactccgtt atgtttcttt attaccttgt tgatcgctgg tgcagancca gcggcggagc 120
cccaaacggt gcgttttgac accgggggggt tgagcagaga cacctttccc aaaggattct 180
tattcggaac ggccacgtct gcgtaccaag tggaggggat ggcccacaaa gacggtcgcg 240
gcccaagcat ttgg 254
```

<210> 702

<211> 264

<212> DNA

<213> Glycine max

<220>

<221> unsure

<222> (1)...(264)

<223> unsure at all n locations

<400> 702

```
caaaaacaaa aacaaagtaa gagttcactc aatctcactg tgttgtgagt tgttgtgtgag 60
caccaaccaa caatgggtgtc tctgactccg ttatgtttct ttattacctt gttgatcgct 120
gggtgcagacg cagcggcgga nccccaaacg gtgcgttttg acaccggggg gttgagcaga 180
gacacctttc ccaaaggatt cttattcgga acggccacgt ctgcgtacca agtggaggggt 240
atggcccaca aagacgggtcg cggc 264
```

<210> 703

<211> 261

<212> DNA

<213> Glycine max

<220>

<221> unsure

<222> (1)...(261)

<223> unsure at all n locations

<400> 703

```
acaaaaacaa agtaagagtt cactcaatct cactgtgttg tgagttgtgt gtgagcacca 60
accaacaatg gtgtctctga ctccgttatg tttctttatt accttgttga tcgctgggtgc 120
agacgcagcg gcggancccc aaacgggtgcg ttttgacacc gggggggttga gcagagacac 180
ctttocccaaa ggattcttat tcggaacggc cacgtctgcg taccaagtgg agggatatggc 240
```

ccacaaagac ggtcgcggcc c 261

<210> 704  
 <211> 251  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(251)  
 <223> unsure at all n locations

<400> 704  
 caaaaacaaa gtaagagttc actcaatctc actgtgttgt gagttgtgtg tgagcaccaa 60  
 ccaacaatgg tgtctctgac tccgttatgt ttctttatta ccttggtgat cgctgggtgca 120  
 gacgcagcgg cggncccaaa cggcgcgttt tgacaccggg ggggtgagca gagacacctt 180  
 tcccaaagga ttcttattcg gaacggccac gtctgcgtac caagtggagg gtatggccca 240  
 caaagacggt c 251

<210> 705  
 <211> 247  
 <212> DNA  
 <213> Glycine max  
 <220>  
 <221> unsure  
 <222> (1)...(247)  
 <223> unsure at all n locations

<400> 705  
 caaaaacaaa aacaaagtaa gngttcactc aatctcactg tgttgtgagt tgtgtgtgag 60  
 caccaaccaa caatggtgtc tctgactcgg ttatgtttct ttattacctt gttgatcgct 120  
 ggtgcagacg cagcggcgga nccccaaacg gtgcgttttg acaccggggg gttgagcaga 180  
 gacacctttc ccaaaggatt cttattcgga acggccacgt ctgcgtacca agtggagggt 240  
 atggccc 247

<210> 706  
 <211> 246  
 <212> DNA  
 <213> Glycine max  
 <400> 706

```

caaaaacaaa aacaaagtaa gagttcactc aatctcactg tgttgtgagt tgtgtgtgag 60
caccaaccaa caatgggtgtc tctgactccg ttatgtttct ttattacctt gttgatcgct 120
gggtgcagacg cagcggcgga gccccaaacg gtgcgttttg acaccggggg gttgagcaga 180
gacacctttc ccaaaggatt cttattcgga acggccacgt ctgcgtacca agtggagggt 240
atggcc 246

```

```

<210> 707
<211> 256
<212> DNA
<213> Glycine max

<220>
<221> unsure
<222> (1)...(256)
<223> unsure at all n locations

```

```

<400> 707

caaaaacaaa aacaaagtaa gagttcactc aatctcactg tgttgtgagt tgtgtgtgag 60
caccaaccaa caatgggtgtc tctgactccg ttatgtttct ttattacctt gttgatcgct 120
gggtgcagacg cagcggcgga nccccaaacg gtgcgttttg acaccggggg gttgagcaga 180
gacacctttc ccaaaggatt cttattcgga acggccacgt ctgcgtacca agtggagggt 240
atggcccaca aagacg 256

```

```

<210> 708
<211> 246
<212> DNA
<213> Glycine max

<220>
<221> unsure
<222> (1)...(246)
<223> unsure at all n locations

```

```

<400> 708

caaaaacaaa gtaagagttc actacntctc actgtgttnn nagttgtgtg tgagcaccca 60
ccaacaatgg tgtctctgac tccgttatgt ttctttatta ccttgttgat cgctgggtgca 120
gacgcagcgg cggagcccca aacggtgcgt tttagacaccg ggggggttgag cagagacacc 180
tttcccaaag gattcttatt cggaacggcc acgtctgcgt accaagtgga gggatatggcc 240
cacaaa 246

```

<210> 709  
 <211> 233  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(233)  
 <223> unsure at all n locations

<400> 709

gtngagcacc aaccaacatt ggtgtctctg actncggtat gtttctttat taccttgttg 60  
 atcgtgggtgc agacgcagcg gcggancccc nnacgggtgcg ttttgacacc ggnggggtga 120  
 gctgagacac ctttcccaaa ggattcttat tcgnaacggc cacgtntgcg taccatgtgg 180  
 agggatatngc ccacaaagat ggtcgcggcc naagcatttg gnacgtcttc acc 233

<210> 710  
 <211> 239  
 <212> DNA  
 <213> Glycine max

<400> 710

caaaaacaaa gtaagagttc actcaatctc actgtgttgt gagttgtgtg tgagcaccaa 60  
 ccaacaatgg tgtctctgac tccgttatgt ttctttatta ccttgttgat cgctgggtgca 120  
 gacgcagcgg cggagcccca aacgggtgcgt tttgacaccg ggggggttgag cagagacacc 180  
 tttcccaaag gattcttatt cggaacggcc acgtctgcgt accaagtgga gggtatggc 239

<210> 711  
 <211> 424  
 <212> DNA  
 <213> Glycine max

<220>  
 <221> unsure  
 <222> (1)...(424)  
 <223> unsure at all n locations

<400> 711

cagagaacga ncaagcncaa agccaaagct actagtcata acggggcccc accgcttccg 60  
 ggaagtgcga gctagccgtg gatttggcct ccacttccc cggcgaactc atcaacgccg 120  
 attccatgca ggtctaccgc ggctngatg ttctcaccaa caaactccct ntctctcacc 180  
 agaacggagt tccgcatcat ctcttgggta ccgtaagccc caacgtggaa ttcactgcca 240

aagcgtttcg ggattccgnt attcccatta ttgatgatat attggctcgt aatcacttgc 300  
ctgttatagt tgggggcact aattactata tccaggctct tgtgagtcg tttcttttag 360  
atgattctgc agaagatatg gatgaaagct ggttgggtga tccaactggg tctggaacaa 420  
tttc 424

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